**XPS Unified Command Interface V1.0.15.x**

[GetVerCommand 14](#_Toc505331045)

[SetGantryMode 15](#_Toc505331046)

[GetGantryMode 16](#_Toc505331047)

[InitializeAndHomeXY 17](#_Toc505331048)

[InitializeAndHomeY 18](#_Toc505331049)

[InitializeAndHomeX 19](#_Toc505331050)

[MoveAbsolute 20](#_Toc505331051)

[MoveSlice 21](#_Toc505331052)

[WaitMotionEnd 22](#_Toc505331053)

[AbortMove 23](#_Toc505331054)

[GetAccParams 24](#_Toc505331055)

[SetAccParams 25](#_Toc505331056)

[GetVelParams 26](#_Toc505331057)

[SetVelParams 27](#_Toc505331058)

[GetXVelParams 28](#_Toc505331059)

[SetXVelParams 29](#_Toc505331060)

[GetYVelParams 30](#_Toc505331061)

[SetYVelParams 31](#_Toc505331062)

[SetJogVelocity 32](#_Toc505331063)

[GetJogVelocity 33](#_Toc505331064)

[SetJogAcceleration 34](#_Toc505331065)

[GetJogAcceleration 35](#_Toc505331066)

[StartJog 36](#_Toc505331067)

[EndJog 37](#_Toc505331068)

[GetCurrentPosition 38](#_Toc505331069)

[SetZone 39](#_Toc505331070)

[GetZone 40](#_Toc505331071)

[SetVarX 41](#_Toc505331072)

[SetVarXSecondary 42](#_Toc505331073)

[SetVarY 43](#_Toc505331074)

[GetVarX 44](#_Toc505331075)

[GetVarXSecondary 45](#_Toc505331076)

[GetVarY 46](#_Toc505331077)

[DataCollectionBufferReset 47](#_Toc505331078)

[DataCollectionBufferAndTimeReset 48](#_Toc505331079)

[DataCollectionRequest 49](#_Toc505331080)

[DataCollectionTimeStampGet 50](#_Toc505331081)

[DataCollectionTimeStampReset 51](#_Toc505331082)

[SetPiston 52](#_Toc505331083)

[GetPistonState 53](#_Toc505331084)

[SetBrake 54](#_Toc505331085)

[GetBrakeState 55](#_Toc505331086)

[ZygoGetVerInterfero 56](#_Toc505331087)

[ZygoAmplitudeGet 57](#_Toc505331088)

[ZygoADCDiagnosticStatusGet 58](#_Toc505331089)

[ZygoPositionGet 59](#_Toc505331090)

[ZygoResetX 60](#_Toc505331091)

[ZygoResetY 61](#_Toc505331092)

[ZygoSetOffsetX 62](#_Toc505331093)

[ZygoSetOffsetY 63](#_Toc505331094)

[ZygoSetPEGParams 64](#_Toc505331095)

[ZygoGetPEGLastCommunicationTime 65](#_Toc505331096)

[FirmwareVersionGet 66](#_Toc505331097)

[FirmwareBuildVersionNumberGet 67](#_Toc505331098)

[InstallerVersionGet 68](#_Toc505331099)

[Reboot 69](#_Toc505331100)

[RestartApplication 70](#_Toc505331101)

[ControllerMotionKernelTimeLoadGet 71](#_Toc505331102)

[ControllerRTTimeGet 72](#_Toc505331103)

[ControllerSlaveStatusGet 73](#_Toc505331104)

[ControllerSlaveStatusStringGet 74](#_Toc505331105)

[ControllerSynchronizeCorrectorISR 75](#_Toc505331106)

[ControllerStatusGet 76](#_Toc505331107)

[ControllerStatusRead 77](#_Toc505331108)

[ControllerStatusStringGet 78](#_Toc505331109)

[ElapsedTimeGet 79](#_Toc505331110)

[ErrorStringGet 80](#_Toc505331111)

[Login 81](#_Toc505331112)

[LoginS 82](#_Toc505331113)

[CloseAllOtherSockets 83](#_Toc505331114)

[HardwareDriverAndStageGet 84](#_Toc505331115)

[HardwareDateAndTimeGet 85](#_Toc505331116)

[HardwareDateAndTimeSet 86](#_Toc505331117)

[FileScriptHistoryRename 87](#_Toc505331118)

[FileGatheringRename 88](#_Toc505331119)

[INTServitudesStatusGet 89](#_Toc505331120)

[INTServitudesCommandGet 90](#_Toc505331121)

[TCLScriptExecute 91](#_Toc505331122)

[TCLScriptExecuteAndWait 92](#_Toc505331123)

[TCLScriptExecuteWithPriority 93](#_Toc505331124)

[TCLScriptKill 94](#_Toc505331125)

[TCLScriptKillAll 95](#_Toc505331126)

[TCLScriptRunningListGet 96](#_Toc505331127)

[TimerGet 97](#_Toc505331128)

[TimerSet 98](#_Toc505331129)

[CleanTmpFolder 99](#_Toc505331130)

[CleanCoreDumpFolder 100](#_Toc505331131)

[GlobalArrayGet 101](#_Toc505331132)

[GlobalArraySet 102](#_Toc505331133)

[DoubleGlobalArrayGet 103](#_Toc505331134)

[DoubleGlobalArraySet 104](#_Toc505331135)

[PositionerMagneticTrackPositionAtHomeGet 105](#_Toc505331136)

[PositionerMotorDualSinForceBalanceGet 106](#_Toc505331137)

[PositionerMotorDualSinForceBalanceSet 107](#_Toc505331138)

[ZygoConnectToServer 108](#_Toc505331139)

[ZygoReset 109](#_Toc505331140)

[ZygoReadWord 110](#_Toc505331141)

[ZygoReadLong 111](#_Toc505331142)

[ZygoWriteWord 112](#_Toc505331143)

[ZygoWriteLong 113](#_Toc505331144)

[ZygoSendAndReceive 114](#_Toc505331145)

[ZygoDisconnectFromServer 115](#_Toc505331146)

[ZygoEthernetCommunicationStatusGet 116](#_Toc505331147)

[ZygoInterferometerStatusGet 117](#_Toc505331148)

[ZygoStartInterferometer 118](#_Toc505331149)

[ZygoStartBoardP2 119](#_Toc505331150)

[ZygoErrorStatusStringGet 120](#_Toc505331151)

[ZygoErrorStatusGet 121](#_Toc505331152)

[ZygoStatusStringGet 122](#_Toc505331153)

[ZygoStatusGet 123](#_Toc505331154)

[ZygoRegisterSet 124](#_Toc505331155)

[ZygoRegisterGet 125](#_Toc505331156)

[EventAdd 126](#_Toc505331157)

[EventGet 127](#_Toc505331158)

[EventRemove 128](#_Toc505331159)

[EventWait 129](#_Toc505331160)

[EventExtendedConfigurationTriggerSet 130](#_Toc505331161)

[EventExtendedConfigurationTriggerGet 131](#_Toc505331162)

[EventExtendedConfigurationActionSet 132](#_Toc505331163)

[EventExtendedConfigurationActionGet 133](#_Toc505331164)

[EventExtendedStart 134](#_Toc505331165)

[EventExtendedAllGet 135](#_Toc505331166)

[EventExtendedGet 136](#_Toc505331167)

[EventExtendedRemove 137](#_Toc505331168)

[EventExtendedWait 138](#_Toc505331169)

[GatheringConfigurationGet 139](#_Toc505331170)

[GatheringConfigurationSet 140](#_Toc505331171)

[GatheringCurrentNumberGet 141](#_Toc505331172)

[GatheringCurrentIndexGet 142](#_Toc505331173)

[GatheringStopAndSave 143](#_Toc505331174)

[GatheringDataAcquire 144](#_Toc505331175)

[GatheringDataGet 145](#_Toc505331176)

[GatheringDataMultipleLinesGet 146](#_Toc505331177)

[GatheringReset 147](#_Toc505331178)

[GatheringRun 148](#_Toc505331179)

[GatheringRunAppend 149](#_Toc505331180)

[GatheringStop 150](#_Toc505331181)

[GatheringExternalConfigurationSet 151](#_Toc505331182)

[GatheringExternalConfigurationGet 152](#_Toc505331183)

[GatheringExternalCurrentNumberGet 153](#_Toc505331184)

[GatheringExternalDataGet 154](#_Toc505331185)

[GatheringExternalStopAndSave 155](#_Toc505331186)

[GPIOAnalogGet 156](#_Toc505331187)

[GPIOAnalogSet 157](#_Toc505331188)

[GPIOAnalogGainGet 158](#_Toc505331189)

[GPIOAnalogGainSet 159](#_Toc505331190)

[GPIOAnalogRangeConfigurationGet 160](#_Toc505331191)

[GPIOAnalogRangeConfigurationSet 161](#_Toc505331192)

[GPIODigitalGet 162](#_Toc505331193)

[GPIODigitalSet 163](#_Toc505331194)

[GPIODigitalPulseWidthGet 164](#_Toc505331195)

[GPIODigitalPulseWidthSet 165](#_Toc505331196)

[GroupAccelerationCurrentGet 166](#_Toc505331197)

[GroupAccelerationSetpointGet 167](#_Toc505331198)

[GroupAnalogTrackingModeEnable 168](#_Toc505331199)

[GroupAnalogTrackingModeDisable 169](#_Toc505331200)

[GroupCorrectorOutputGet 170](#_Toc505331201)

[GroupCurrentFollowingErrorGet 171](#_Toc505331202)

[GroupHomeSearch 172](#_Toc505331203)

[GroupHomeSearchAndRelativeMove 173](#_Toc505331204)

[GroupInitialize 174](#_Toc505331205)

[GroupInitializeNoEncoderReset 175](#_Toc505331206)

[GroupInitializeWithEncoderCalibration 176](#_Toc505331207)

[GroupGantryModeGet 177](#_Toc505331208)

[GroupGantryModeSet 178](#_Toc505331209)

[GroupInterlockDisable 179](#_Toc505331210)

[GroupInterlockEnable 180](#_Toc505331211)

[GroupJogParametersSet 181](#_Toc505331212)

[GroupJogParametersGet 182](#_Toc505331213)

[GroupJogCurrentGet 183](#_Toc505331214)

[GroupJogModeEnable 184](#_Toc505331215)

[GroupJogModeDisable 185](#_Toc505331216)

[GroupKill 186](#_Toc505331217)

[GroupMotionDisable 187](#_Toc505331218)

[GroupMotionEnable 188](#_Toc505331219)

[GroupMotionStatusGet 189](#_Toc505331220)

[GroupMoveAbort 190](#_Toc505331221)

[GroupMoveAbortFast 191](#_Toc505331222)

[GroupMoveAbsolute 192](#_Toc505331223)

[GroupMoveEndWait 193](#_Toc505331224)

[GroupMoveRelative 194](#_Toc505331225)

[GroupPositionCurrentGet 195](#_Toc505331226)

[GroupPositionSetpointGet 196](#_Toc505331227)

[GroupPositionTargetGet 197](#_Toc505331228)

[GroupReferencingActionExecute 198](#_Toc505331229)

[GroupReferencingStart 199](#_Toc505331230)

[GroupReferencingStop 200](#_Toc505331231)

[GroupStatusGet 201](#_Toc505331232)

[GroupStatusStringGet 202](#_Toc505331233)

[GroupVelocityCurrentGet 203](#_Toc505331234)

[GroupVelocitySetpointGet 204](#_Toc505331235)

[KillAll 205](#_Toc505331236)

[PositionerDriverStatusGet 206](#_Toc505331237)

[PositionerDriverStatusStringGet 207](#_Toc505331238)

[PositionerErrorGet 208](#_Toc505331239)

[PositionerErrorRead 209](#_Toc505331240)

[PositionerErrorStringGet 210](#_Toc505331241)

[PositionerHardwareStatusGet 211](#_Toc505331242)

[PositionerHardwareStatusStringGet 212](#_Toc505331243)

[PositionersEncoderIndexDifferenceGet 213](#_Toc505331244)

[PositionerGantryEndReferencingPositionGet 214](#_Toc505331245)

[PositionerStageParameterGet 215](#_Toc505331246)

[PositionerStageParameterSet 216](#_Toc505331247)

[PositionerCorrectorTypeGet 217](#_Toc505331248)

[PositionerCorrectorFilterListGet 218](#_Toc505331249)

[PositionerWarningFollowingErrorSet 219](#_Toc505331250)

[PositionerWarningFollowingErrorGet 220](#_Toc505331251)

[PositionerCompensationPositionFilterSet 221](#_Toc505331252)

[PositionerCompensationPositionFilterGet 222](#_Toc505331253)

[PositionerCorrectorPlantFeedForwardDelaySet 223](#_Toc505331254)

[PositionerCorrectorPlantFeedForwardDelayGet 224](#_Toc505331255)

[PositionerCompensationDisturbanceDisable 225](#_Toc505331256)

[PositionerCompensationDisturbanceEnable 226](#_Toc505331257)

[PositionerCompensationDisturbanceFileLoad 227](#_Toc505331258)

[PositionerCompensationDisturbanceStatusGet 228](#_Toc505331259)

[PositionerCorrectorAutoTuning 229](#_Toc505331260)

[PositionerAccelerationAutoScaling 230](#_Toc505331261)

[PositionerExcitationSignalGet 231](#_Toc505331262)

[PositionerExcitationSignalSet 232](#_Toc505331263)

[PositionerExcitationSignalCorrectorOutSet 233](#_Toc505331264)

[PositionerCurrentVelocityAccelerationFiltersSet 234](#_Toc505331265)

[PositionerCurrentVelocityAccelerationFiltersGet 235](#_Toc505331266)

[PositionerEncoderAmplitudeValuesGet 236](#_Toc505331267)

[PositionerEncoderCalibrationParametersGet 237](#_Toc505331268)

[PositionerRawEncoderPositionGet 238](#_Toc505331269)

[PositionerCorrectorPIDFFAccelerationSet 239](#_Toc505331270)

[PositionerCorrectorPIDFFAccelerationGet 241](#_Toc505331271)

[PositionerCorrectorPIDAccelerationFilterSet 243](#_Toc505331272)

[PositionerCorrectorPIDAccelerationFilterGet 244](#_Toc505331273)

[PositionerCorrectorDamperFilterSet 245](#_Toc505331274)

[PositionerCorrectorDamperFilterGet 246](#_Toc505331275)

[PositionerCorrectorPostFFSet 247](#_Toc505331276)

[PositionerCorrectorPostFFGet 248](#_Toc505331277)

[PositionerCorrectorExcitationSignalGainSet 249](#_Toc505331278)

[PositionerCorrectorExcitationSignalGainGet 250](#_Toc505331279)

[PositionerCorrectorPIDBaseSet 251](#_Toc505331280)

[PositionerCorrectorPIDBaseGet 252](#_Toc505331281)

[PositionerPositionCompareScanAccelerationLimitGet 253](#_Toc505331282)

[PositionerPositionCompareScanAccelerationLimitSet 254](#_Toc505331283)

[PositionerCorrectorPIDDualFFVoltageSet 255](#_Toc505331284)

[PositionerCorrectorPIDDualFFVoltageGet 257](#_Toc505331285)

[PositionerCorrectorPIDFFVelocitySet 259](#_Toc505331286)

[PositionerCorrectorPIDFFVelocityGet 261](#_Toc505331287)

[PositionerCorrectorPIPositionSet 263](#_Toc505331288)

[PositionerCorrectorPIPositionGet 264](#_Toc505331289)

[PositionerCorrectorDualSet 265](#_Toc505331290)

[PositionerCorrectorDualGet 266](#_Toc505331291)

[PositionerCompensationDualLoopNotchFilterSet 267](#_Toc505331292)

[PositionerCompensationDualLoopNotchFilterGet 268](#_Toc505331293)

[PositionerCompensationDualLoopPhaseCorrectionFilterSet 269](#_Toc505331294)

[PositionerCompensationDualLoopPhaseCorrectionFilterGet 270](#_Toc505331295)

[PositionerDriverFiltersGet 271](#_Toc505331296)

[PositionerDriverFiltersSet 272](#_Toc505331297)

[PositionerDriverPositionOffsetsGet 273](#_Toc505331298)

[PositionerPreCorrectorExcitationSignalGet 274](#_Toc505331299)

[PositionerPreCorrectorExcitationSignalSet 275](#_Toc505331300)

[PositionerBacklashSet 276](#_Toc505331301)

[PositionerBacklashGet 277](#_Toc505331302)

[PositionerBacklashEnable 278](#_Toc505331303)

[PositionerBacklashDisable 279](#_Toc505331304)

[PositionerMotionDoneGet 280](#_Toc505331305)

[PositionerMotionDoneSet 281](#_Toc505331306)

[PositionerHardInterpolatorFactorGet 282](#_Toc505331307)

[PositionerHardInterpolatorFactorSet 283](#_Toc505331308)

[PositionerHardInterpolatorPositionGet 284](#_Toc505331309)

[PositionerPositionCompareGet 285](#_Toc505331310)

[PositionerPositionCompareSet 286](#_Toc505331311)

[PositionerPositionCompareEnable 287](#_Toc505331312)

[PositionerPositionCompareDisable 288](#_Toc505331313)

[PositionerPositionCompareAquadBAlwaysEnable 289](#_Toc505331314)

[PositionerPositionCompareAquadBWindowedGet 290](#_Toc505331315)

[PositionerPositionCompareAquadBWindowedSet 291](#_Toc505331316)

[PositionerTimeFlasherGet 292](#_Toc505331317)

[PositionerTimeFlasherSet 293](#_Toc505331318)

[PositionerTimeFlasherEnable 294](#_Toc505331319)

[PositionerTimeFlasherDisable 295](#_Toc505331320)

[PositionerPositionComparePulseParametersGet 296](#_Toc505331321)

[PositionerPositionComparePulseParametersSet 297](#_Toc505331322)

[PositionerPositionCompareAquadBPrescalerSet 298](#_Toc505331323)

[PositionerPositionCompareAquadBPrescalerGet 299](#_Toc505331324)

[PositionerCompensatedPCOAbort 300](#_Toc505331325)

[PositionerCompensatedPCOCurrentStatusGet 301](#_Toc505331326)

[PositionerCompensatedPCOEnable 302](#_Toc505331327)

[PositionerCompensatedPCOFromFile 303](#_Toc505331328)

[PositionerCompensatedPCOLoadToMemory 304](#_Toc505331329)

[PositionerCompensatedPCOMemoryReset 305](#_Toc505331330)

[PositionerCompensatedPCOPrepare 306](#_Toc505331331)

[PositionerCompensatedPCOSet 307](#_Toc505331332)

[PositionerCompensatedFastPCOAbort 308](#_Toc505331333)

[PositionerCompensatedFastPCOCurrentStatusGet 309](#_Toc505331334)

[PositionerCompensatedFastPCOEnable 310](#_Toc505331335)

[PositionerCompensatedFastPCOFromFile 311](#_Toc505331336)

[PositionerCompensatedFastPCOLoadToMemory 312](#_Toc505331337)

[PositionerCompensatedFastPCOMemoryReset 313](#_Toc505331338)

[PositionerCompensatedFastPCOPrepare 314](#_Toc505331339)

[PositionerCompensatedFastPCOSet 315](#_Toc505331340)

[PositionerCompensatedFastPCOPulseParametersGet 316](#_Toc505331341)

[PositionerCompensatedFastPCOPulseParametersSet 317](#_Toc505331342)

[PositionerCompensationEncoderNotchFilterSet 318](#_Toc505331343)

[PositionerCompensationEncoderNotchFilterGet 319](#_Toc505331344)

[PositionerCompensationNotchFilterSet 320](#_Toc505331345)

[PositionerCompensationNotchFilterGet 321](#_Toc505331346)

[PositionerCompensationPhaseCorrectionFilterSet 322](#_Toc505331347)

[PositionerCompensationPhaseCorrectionFilterGet 323](#_Toc505331348)

[PositionerCorrectorNotchFiltersSet 324](#_Toc505331349)

[PositionerCorrectorNotchFiltersGet 325](#_Toc505331350)

[PositionerCompensationPreFeedForwardFrequencyNotchFilterGet 326](#_Toc505331351)

[PositionerCompensationPreFeedForwardFrequencyNotchFilterSet 327](#_Toc505331352)

[PositionerCompensationPreFeedForwardSpatialNotchFilterGet 328](#_Toc505331353)

[PositionerCompensationPreFeedForwardSpatialNotchFilterSet 329](#_Toc505331354)

[PositionerCompensationPreFeedForwardPhaseCorrectionFilterGet 330](#_Toc505331355)

[PositionerCompensationPreFeedForwardPhaseCorrectionFilterSet 331](#_Toc505331356)

[PositionerCompensationFrequencyNotchsGet 332](#_Toc505331357)

[PositionerCompensationFrequencyNotchsSet 334](#_Toc505331358)

[PositionerCompensationSpatialPeriodicNotchsGet 335](#_Toc505331359)

[PositionerCompensationSpatialPeriodicNotchsSet 337](#_Toc505331360)

[PositionerCompensationPostExcitationLowPassFilterGet 339](#_Toc505331361)

[PositionerCompensationPostExcitationLowPassFilterSet 340](#_Toc505331362)

[PositionerCompensationPostExcitationFrequencyNotchFilterGet 341](#_Toc505331363)

[PositionerCompensationPostExcitationFrequencyNotchFilterSet 342](#_Toc505331364)

[PositionerCompensationPostExcitationNotchModeFilterGet 343](#_Toc505331365)

[PositionerCompensationPostExcitationNotchModeFilterSet 344](#_Toc505331366)

[PositionerCompensationPostExcitationPhaseCorrectionFilterGet 345](#_Toc505331367)

[PositionerCompensationPostExcitationPhaseCorrectionFilterSet 346](#_Toc505331368)

[PositionerCompensationLowPassTwoFilterGet 347](#_Toc505331369)

[PositionerCompensationLowPassTwoFilterSet 348](#_Toc505331370)

[PositionerCompensationNotchModeFiltersGet 349](#_Toc505331371)

[PositionerCompensationNotchModeFiltersSet 350](#_Toc505331372)

[PositionerCompensationPhaseCorrectionFiltersGet 351](#_Toc505331373)

[PositionerCompensationPhaseCorrectionFiltersSet 352](#_Toc505331374)

[PositionerAnalogTrackingPositionParametersGet 353](#_Toc505331375)

[PositionerAnalogTrackingPositionParametersSet 354](#_Toc505331376)

[PositionerAnalogTrackingVelocityParametersGet 355](#_Toc505331377)

[PositionerAnalogTrackingVelocityParametersSet 356](#_Toc505331378)

[PositionerJogMaximumVelocityAndAccelerationGet 357](#_Toc505331379)

[PositionerMaximumVelocityAndAccelerationGet 358](#_Toc505331380)

[PositionerUserTravelLimitsGet 359](#_Toc505331381)

[PositionerUserTravelLimitsSet 360](#_Toc505331382)

[PositionerSGammaExactVelocityAjustedDisplacementGet 361](#_Toc505331383)

[PositionerSGammaParametersGet 362](#_Toc505331384)

[PositionerSGammaParametersSet 363](#_Toc505331385)

[PositionerSGammaVelocityAndAccelerationSet 364](#_Toc505331386)

[PositionerSGammaPreviousMotionTimesGet 365](#_Toc505331387)

[MultipleAxesPTVerification 366](#_Toc505331388)

[MultipleAxesPTVerificationResultGet 367](#_Toc505331389)

[MultipleAxesPTExecution 368](#_Toc505331390)

[MultipleAxesPTParametersGet 369](#_Toc505331391)

[MultipleAxesPTPulseOutputSet 370](#_Toc505331392)

[MultipleAxesPTPulseOutputGet 371](#_Toc505331393)

[MultipleAxesPTLoadToMemory 372](#_Toc505331394)

[MultipleAxesPTResetInMemory 373](#_Toc505331395)

[XYPTVerification 374](#_Toc505331396)

[XYPTVerificationResultGet 375](#_Toc505331397)

[XYPTExecution 376](#_Toc505331398)

[XYPTParametersGet 377](#_Toc505331399)

[XYPTPulseOutputSet 378](#_Toc505331400)

[XYPTPulseOutputGet 379](#_Toc505331401)

[XYPTLoadToMemory 380](#_Toc505331402)

[XYPTResetInMemory 381](#_Toc505331403)

[TZPTVerification 382](#_Toc505331404)

[TZPTVerificationResultGet 383](#_Toc505331405)

[TZPTExecution 384](#_Toc505331406)

[TZPTParametersGet 385](#_Toc505331407)

[TZPTPulseOutputSet 386](#_Toc505331408)

[TZPTPulseOutputGet 387](#_Toc505331409)

[TZPTLoadToMemory 388](#_Toc505331410)

[TZPTResetInMemory 389](#_Toc505331411)

[MultipleAxesPVTVerification 390](#_Toc505331412)

[MultipleAxesPVTVerificationResultGet 391](#_Toc505331413)

[MultipleAxesPVTExecution 392](#_Toc505331414)

[MultipleAxesPVTParametersGet 393](#_Toc505331415)

[MultipleAxesPVTPulseOutputSet 394](#_Toc505331416)

[MultipleAxesPVTPulseOutputGet 395](#_Toc505331417)

[MultipleAxesPVTLoadToMemory 396](#_Toc505331418)

[MultipleAxesPVTResetInMemory 397](#_Toc505331419)

[XYPVTVerification 398](#_Toc505331420)

[XYPVTVerificationResultGet 399](#_Toc505331421)

[XYPVTExecution 400](#_Toc505331422)

[XYPVTParametersGet 401](#_Toc505331423)

[XYPVTPulseOutputSet 402](#_Toc505331424)

[XYPVTPulseOutputGet 403](#_Toc505331425)

[XYPVTLoadToMemory 404](#_Toc505331426)

[XYPVTResetInMemory 405](#_Toc505331427)

[TZPVTVerification 406](#_Toc505331428)

[TZPVTVerificationResultGet 407](#_Toc505331429)

[TZPVTExecution 408](#_Toc505331430)

[TZPVTParametersGet 409](#_Toc505331431)

[TZPVTPulseOutputSet 410](#_Toc505331432)

[TZPVTPulseOutputGet 411](#_Toc505331433)

[TZPVTLoadToMemory 412](#_Toc505331434)

[TZPVTResetInMemory 413](#_Toc505331435)

[XYLineArcVerification 414](#_Toc505331436)

[XYLineArcVerificationResultGet 415](#_Toc505331437)

[XYLineArcExecution 416](#_Toc505331438)

[XYLineArcParametersGet 417](#_Toc505331439)

[XYLineArcPulseOutputSet 418](#_Toc505331440)

[XYLineArcPulseOutputGet 419](#_Toc505331441)

[XYZSplineVerification 420](#_Toc505331442)

[XYZSplineVerificationResultGet 421](#_Toc505331443)

[XYZSplineExecution 422](#_Toc505331444)

[XYZSplineParametersGet 423](#_Toc505331445)

[XYZSplinePulseOutputSet 424](#_Toc505331446)

[XYZSplinePulseOutputGet 425](#_Toc505331447)

[SingleAxisSlaveModeEnable 426](#_Toc505331448)

[SingleAxisSlaveModeDisable 427](#_Toc505331449)

[SingleAxisSlaveParametersSet 428](#_Toc505331450)

[SingleAxisSlaveParametersGet 429](#_Toc505331451)

[SpindleSlaveModeEnable 430](#_Toc505331452)

[SpindleSlaveModeDisable 431](#_Toc505331453)

[SpindleSlaveParametersSet 432](#_Toc505331454)

[SpindleSlaveParametersGet 433](#_Toc505331455)

[GroupSpinParametersSet 434](#_Toc505331456)

[GroupSpinParametersGet 435](#_Toc505331457)

[GroupSpinCurrentGet 436](#_Toc505331458)

[GroupSpinModeStop 437](#_Toc505331459)

[PositionerFeedforwardAccDisable 438](#_Toc505331460)

[PositionerFeedforwardAccEnable 439](#_Toc505331461)

[PositionerFeedforwardAccGet 440](#_Toc505331462)

[PositionerFeedforwardAccSet 441](#_Toc505331463)

[PositionerFeedforwardPositionDisable 442](#_Toc505331464)

[PositionerFeedforwardPositionEnable 443](#_Toc505331465)

[PositionerFeedforwardPositionGet 444](#_Toc505331466)

[PositionerFeedforwardPositionSet 445](#_Toc505331467)

[GroupBrakeSet 446](#_Toc505331468)

[GroupBrakeStateGet 447](#_Toc505331469)

[XYCrossTalkCompensationMotorDecouplingSet 448](#_Toc505331470)

[XYCrossTalkCompensationMotorDecouplingGet 449](#_Toc505331471)

[XYGroupPositionPCORawEncoderGet 450](#_Toc505331472)

[XYGroupPositionCorrectedProfilerGet 451](#_Toc505331473)

[XYMappingGet 452](#_Toc505331474)

[XYMappingSet 453](#_Toc505331475)

[XYZGroupPositionCorrectedProfilerGet 454](#_Toc505331476)

[XYZGroupPositionPCORawEncoderGet 455](#_Toc505331477)

[SingleAxisThetaClampDisable 456](#_Toc505331478)

[SingleAxisThetaClampEnable 457](#_Toc505331479)

[SingleAxisThetaFeedforwardParametersGet 458](#_Toc505331480)

[SingleAxisThetaFeedforwardParametersSet 459](#_Toc505331481)

[SingleAxisThetaFeedforwardJerkParametersGet 460](#_Toc505331482)

[SingleAxisThetaFeedforwardJerkParametersSet 461](#_Toc505331483)

[SingleAxisThetaSlaveModeEnable 462](#_Toc505331484)

[SingleAxisThetaSlaveModeDisable 463](#_Toc505331485)

[SingleAxisThetaSlaveParametersGet 464](#_Toc505331486)

[SingleAxisThetaSlaveParametersSet 465](#_Toc505331487)

[TZMotorDecouplingMatrixGet 466](#_Toc505331488)

[TZMotorDecouplingMatrixSet 467](#_Toc505331489)

[TZMotorDecouplingModeGet 468](#_Toc505331490)

[TZMotorDecouplingModeSet 469](#_Toc505331491)

[TZEncoderCouplingMatrixGet 470](#_Toc505331492)

[TZEncoderCouplingMatrixSet 471](#_Toc505331493)

[TZEncoderCouplingModeGet 472](#_Toc505331494)

[TZEncoderCouplingModeSet 473](#_Toc505331495)

[TZMappingModeGet 474](#_Toc505331496)

[TZMappingModeSet 475](#_Toc505331497)

[TZTrackingCutOffFrequencyGet 476](#_Toc505331498)

[TZTrackingCutOffFrequencySet 477](#_Toc505331499)

[TZFocusModeEnable 478](#_Toc505331500)

[TZFocusModeDisable 479](#_Toc505331501)

[TZTrackingUserMaximumZZZTargetDifferenceGet 480](#_Toc505331502)

[TZTrackingUserMaximumZZZTargetDifferenceSet 481](#_Toc505331503)

[ExternalModuleSocketReserve 482](#_Toc505331504)

[ExternalModuleSocketFree 483](#_Toc505331505)

[ExternalModuleScanFuncTimeDurationsGet 484](#_Toc505331506)

[ExternalModuleFirmwareVersionGet 485](#_Toc505331507)

[LoginCheck 486](#_Toc505331508)

[LoginSCheck 487](#_Toc505331509)

[GroupAllPositionTrace 488](#_Toc505331510)

[GroupMotorMatrixTrace 489](#_Toc505331511)

[GroupMotorMatrixInverseTrace 490](#_Toc505331512)

[GroupPositionCurrentRawGet 491](#_Toc505331513)

[PositionerMotorOutputOffsetGet 492](#_Toc505331514)

[PositionerMotorOutputOffsetSet 493](#_Toc505331515)

[SingleAxisThetaPositionRawGet 494](#_Toc505331516)

[SingleAxisThetaPositionRawCorrectedGet 495](#_Toc505331517)

[EEPROMCIESet 496](#_Toc505331518)

[EEPROMDACOffsetCIESet 497](#_Toc505331519)

[EEPROMDriverSet 498](#_Toc505331520)

[EEPROMINTSet 499](#_Toc505331521)

[CPUCoreAndBoardSupplyVoltagesGet 500](#_Toc505331522)

[CPUTemperatureAndFanSpeedGet 501](#_Toc505331523)

[CIEHeaderGet 502](#_Toc505331524)

[CIEReset 503](#_Toc505331525)

[ActionListGet 504](#_Toc505331526)

[ActionExtendedListGet 505](#_Toc505331527)

[APIExtendedListGet 506](#_Toc505331528)

[APIListGet 507](#_Toc505331529)

[APIListStandardGet 508](#_Toc505331530)

[APIListAMATGet 509](#_Toc505331531)

[ControllerStatusListGet 510](#_Toc505331532)

[ErrorListGet 511](#_Toc505331533)

[EventListGet 512](#_Toc505331534)

[GatheringListGet 513](#_Toc505331535)

[GatheringExtendedListGet 514](#_Toc505331536)

[GatheringExternalListGet 515](#_Toc505331537)

[GroupStatusListGet 516](#_Toc505331538)

[HardwareInternalListGet 517](#_Toc505331539)

[ObjectsListGet 518](#_Toc505331540)

[PositionerErrorListGet 519](#_Toc505331541)

[PositionerHardwareStatusListGet 520](#_Toc505331542)

[PositionerDriverStatusListGet 521](#_Toc505331543)

[ReferencingActionListGet 522](#_Toc505331544)

[ReferencingSensorListGet 523](#_Toc505331545)

[SystemIniParameterGet 524](#_Toc505331546)

[SystemIniParameterSet 525](#_Toc505331547)

[SystemRefParameterGet 526](#_Toc505331548)

[SystemRefParameterSet 527](#_Toc505331549)

[FirmwareRefParameterGet 528](#_Toc505331550)

[GatheringUserDatasGet 529](#_Toc505331551)

[GatheringUserDatasReset 531](#_Toc505331552)

[SocketsStatusGet 532](#_Toc505331553)

[TestTCP 533](#_Toc505331554)

[OptionalModuleExecute 534](#_Toc505331555)

[OptionalModuleKill 535](#_Toc505331556)

[DRV11StatusGet 536](#_Toc505331557)

[DebugTraceCommunicationReset 537](#_Toc505331558)

[DebugTraceCommunicationSave 538](#_Toc505331559)

[RunTraceloggerProcessWithTimeSetting 539](#_Toc505331560)

[RunTraceloggerProcessWithRollingBuffer 540](#_Toc505331561)

[CreateQNXEvent 541](#_Toc505331562)

[StartEventsAcqusition 542](#_Toc505331563)

[StopEventsAcqusition 543](#_Toc505331564)

[EventTriggerSet 544](#_Toc505331565)

[DebugISRReset 545](#_Toc505331566)

[DebugISRCorrectorLoadRatioGet 546](#_Toc505331567)

[DebugISRProfilerLoadRatioGet 547](#_Toc505331568)

[DebugISRServitudesLoadRatioGet 548](#_Toc505331569)

[DebugISRCorrectorUsageGet 549](#_Toc505331570)

[DebugISRProfilerUsageGet 550](#_Toc505331571)

[DebugISRServitudesUsageGet 551](#_Toc505331572)

[DebugCorrectorTimeUsageGet 552](#_Toc505331573)

[DebugProfilerTimeUsageGet 554](#_Toc505331574)

[DebugServitudesTimeUsageGet 555](#_Toc505331575)

[ControllerMotionKernelMinMaxTimeLoadGet 556](#_Toc505331576)

[ControllerMotionKernelMinMaxTimeLoadReset 558](#_Toc505331577)

[ControllerMotionKernelPeriodMinMaxGet 559](#_Toc505331578)

[ControllerMotionKernelPeriodMinMaxReset 560](#_Toc505331579)

[ISRCorrectorCompensateOverrunNumberGet 561](#_Toc505331580)

[ISRCorrectorCompensateOverrunNumberReset 562](#_Toc505331581)

[RunQconn 563](#_Toc505331582)

[Crash 564](#_Toc505331583)

[RunPidin 565](#_Toc505331584)

### GetVerCommand

#### Syntax

##### C# prototype

int GetVerCommand(out string Version, out string errstring)

##### Python prototype

[Version, errstring] GetVerCommand ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Version: Version

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetVerCommand command which is used to Return firmware version. Refer to the XPS Programmer's manual to get the command description.

### SetGantryMode

#### Syntax

##### C# prototype

int SetGantryMode(string Option, out string errstring)

##### Python prototype

[errstring] SetGantryMode (Option)

#### Parameters

##### Input parameters

(string) Option: Option

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetGantryMode command which is used to Set Gantry mode . Refer to the XPS Programmer's manual to get the command description.

### GetGantryMode

#### Syntax

##### C# prototype

int GetGantryMode(out string Option, out string errstring)

##### Python prototype

[Option, errstring] GetGantryMode ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Option: Option

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetGantryMode command which is used to Set Gantry mode . Refer to the XPS Programmer's manual to get the command description.

### InitializeAndHomeXY

#### Syntax

##### C# prototype

int InitializeAndHomeXY(string Option, out string errstring)

##### Python prototype

[errstring] InitializeAndHomeXY (Option)

#### Parameters

##### Input parameters

(string) Option: Option

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous InitializeAndHomeXY command which is used to Do a Home search on X and after Y axis. Refer to the XPS Programmer's manual to get the command description.

### InitializeAndHomeY

#### Syntax

##### C# prototype

int InitializeAndHomeY( out string errstring)

##### Python prototype

[errstring] InitializeAndHomeY ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous InitializeAndHomeY command which is used to Do a Home search on Y axis. It's always the scale. Refer to the XPS Programmer's manual to get the command description.

### InitializeAndHomeX

#### Syntax

##### C# prototype

int InitializeAndHomeX(string Option, out string errstring)

##### Python prototype

[errstring] InitializeAndHomeX (Option)

#### Parameters

##### Input parameters

(string) Option: Option

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous InitializeAndHomeX command which is used to Do a Home search on X axis. Refer to the XPS Programmer's manual to get the command description.

### MoveAbsolute

#### Syntax

##### C# prototype

int MoveAbsolute(double PositonAbsoluteX\_um, double PositionAbsoluteY\_um, out string errstring)

##### Python prototype

[errstring] MoveAbsolute (PositonAbsoluteX\_um, PositionAbsoluteY\_um)

#### Parameters

##### Input parameters

(double) PositonAbsoluteX\_um: PositonAbsoluteX\_um

(double) PositionAbsoluteY\_um: PositionAbsoluteY\_um

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MoveAbsolute command which is used to Moves the stage to the end position. The positions are defined in um. Refer to the XPS Programmer's manual to get the command description.

### MoveSlice

#### Syntax

##### C# prototype

int MoveSlice(double y\_end\_um, double x\_end\_um, double scan\_angle\_urad, out string errstring)

##### Python prototype

[errstring] MoveSlice (y\_end\_um, x\_end\_um, scan\_angle\_urad)

#### Parameters

##### Input parameters

(double) y\_end\_um: y\_end\_um

(double) x\_end\_um: x\_end\_um

(double) scan\_angle\_urad: scan\_angle\_urad

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MoveSlice command which is used to Moves the stage to the end position. Begin a linear interpolation to move to . Refer to the XPS Programmer's manual to get the command description.

### WaitMotionEnd

#### Syntax

##### C# prototype

int WaitMotionEnd(double time\_out\_ms, double y\_end\_um, double x\_end\_um, out string errstring)

##### Python prototype

[errstring] WaitMotionEnd (time\_out\_ms, y\_end\_um, x\_end\_um)

#### Parameters

##### Input parameters

(double) time\_out\_ms: time\_out\_ms

(double) y\_end\_um: y\_end\_um

(double) x\_end\_um: x\_end\_um

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous WaitMotionEnd command which is used to Waits the end of motion and checks the target positions. Refer to the XPS Programmer's manual to get the command description.

### AbortMove

#### Syntax

##### C# prototype

int AbortMove( out string errstring)

##### Python prototype

[errstring] AbortMove ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous AbortMove command which is used to Abort motion. Refer to the XPS Programmer's manual to get the command description.

### GetAccParams

#### Syntax

##### C# prototype

int GetAccParams(out Int32 x\_acc\_time\_ms, out Int32 x\_smooth\_factor\_ms, out Int32 y\_acc\_time\_ms, out Int32 y\_smooth\_factor\_ms, out string errstring)

##### Python prototype

[x\_acc\_time\_ms, x\_smooth\_factor\_ms, y\_acc\_time\_ms, y\_smooth\_factor\_ms, errstring] GetAccParams ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) x\_acc\_time\_ms: x\_acc\_time\_ms

(Int32\_i) x\_smooth\_factor\_ms: x\_smooth\_factor\_ms

(Int32\_i) y\_acc\_time\_ms: y\_acc\_time\_ms

(Int32\_i) y\_smooth\_factor\_ms: y\_smooth\_factor\_ms

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetAccParams command which is used to Read acceleration parameters. Smooth factor = jerk time and all parameters unit in msec. Refer to the XPS Programmer's manual to get the command description.

### SetAccParams

#### Syntax

##### C# prototype

int SetAccParams(Int32 x\_acc\_time\_ms, Int32 x\_smooth\_factor\_ms, Int32 y\_acc\_time\_ms, Int32 y\_smooth\_factor\_ms, out string errstring)

##### Python prototype

[errstring] SetAccParams (x\_acc\_time\_ms, x\_smooth\_factor\_ms, y\_acc\_time\_ms, y\_smooth\_factor\_ms)

#### Parameters

##### Input parameters

(Int32) x\_acc\_time\_ms: x\_acc\_time\_ms

(Int32) x\_smooth\_factor\_ms: x\_smooth\_factor\_ms

(Int32) y\_acc\_time\_ms: y\_acc\_time\_ms

(Int32) y\_smooth\_factor\_ms: y\_smooth\_factor\_ms

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetAccParams command which is used to Update acceleration parameters. Smooth factor = jerk time and all parameters unit in msec. Refer to the XPS Programmer's manual to get the command description.

### GetVelParams

#### Syntax

##### C# prototype

int GetVelParams(out double vel\_x, out double vel\_y, out string errstring)

##### Python prototype

[vel\_x, vel\_y, errstring] GetVelParams ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) vel\_x: vel\_x

(double) vel\_y: vel\_y

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetVelParams command which is used to Read velocity parameters. All parameters unit in microns/sec. Refer to the XPS Programmer's manual to get the command description.

### SetVelParams

#### Syntax

##### C# prototype

int SetVelParams(double vel\_x, double vel\_y, out string errstring)

##### Python prototype

[errstring] SetVelParams (vel\_x, vel\_y)

#### Parameters

##### Input parameters

(double) vel\_x: vel\_x

(double) vel\_y: vel\_y

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetVelParams command which is used to Update velocity parameters. All parameters unit in microns/sec. Refer to the XPS Programmer's manual to get the command description.

### GetXVelParams

#### Syntax

##### C# prototype

int GetXVelParams(out double vel\_x, out string errstring)

##### Python prototype

[vel\_x, errstring] GetXVelParams ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) vel\_x: vel\_x

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetXVelParams command which is used to Read velocity parameter for X axis. Parameter unit in microns/sec. Refer to the XPS Programmer's manual to get the command description.

### SetXVelParams

#### Syntax

##### C# prototype

int SetXVelParams(double vel\_x, out string errstring)

##### Python prototype

[errstring] SetXVelParams (vel\_x)

#### Parameters

##### Input parameters

(double) vel\_x: vel\_x

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetXVelParams command which is used to Update velocity parameter for X axis. Parameter unit in microns/sec. Refer to the XPS Programmer's manual to get the command description.

### GetYVelParams

#### Syntax

##### C# prototype

int GetYVelParams(out double vel\_y, out string errstring)

##### Python prototype

[vel\_y, errstring] GetYVelParams ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) vel\_y: vel\_y

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetYVelParams command which is used to Read velocity parameter for Y axis. Parameter unit in microns/sec. Refer to the XPS Programmer's manual to get the command description.

### SetYVelParams

#### Syntax

##### C# prototype

int SetYVelParams(double vel\_y, out string errstring)

##### Python prototype

[errstring] SetYVelParams (vel\_y)

#### Parameters

##### Input parameters

(double) vel\_y: vel\_y

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetYVelParams command which is used to Update velocity parameter for Y axis. Parameter unit in microns/sec. Refer to the XPS Programmer's manual to get the command description.

### SetJogVelocity

#### Syntax

##### C# prototype

int SetJogVelocity(double vx, double vy, Int32 joystickAck\_Timeout\_ms, out string errstring)

##### Python prototype

[errstring] SetJogVelocity (vx, vy, joystickAck\_Timeout\_ms)

#### Parameters

##### Input parameters

(double) vx: vx

(double) vy: vy

(Int32) joystickAck\_Timeout\_ms: joystickAck\_Timeout\_ms

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetJogVelocity command which is used to Modify Jog velocity. Refer to the XPS Programmer's manual to get the command description.

### GetJogVelocity

#### Syntax

##### C# prototype

int GetJogVelocity(out double vx, out double vy, out Int32 joystickAck\_Timeout\_ms, out string errstring)

##### Python prototype

[vx, vy, joystickAck\_Timeout\_ms, errstring] GetJogVelocity ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) vx: vx

(double) vy: vy

(Int32\_i) joystickAck\_Timeout\_ms: joystickAck\_Timeout\_ms

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetJogVelocity command which is used to Get Jog velocity. Refer to the XPS Programmer's manual to get the command description.

### SetJogAcceleration

#### Syntax

##### C# prototype

int SetJogAcceleration(Int32 x\_acceleration\_Time\_ms, Int32 x\_smooth\_factor\_ms, Int32 y\_acceleration\_Time\_ms, Int32 y\_smooth\_factor\_ms, out string errstring)

##### Python prototype

[errstring] SetJogAcceleration (x\_acceleration\_Time\_ms, x\_smooth\_factor\_ms, y\_acceleration\_Time\_ms, y\_smooth\_factor\_ms)

#### Parameters

##### Input parameters

(Int32) x\_acceleration\_Time\_ms: x\_acceleration\_Time\_ms

(Int32) x\_smooth\_factor\_ms: x\_smooth\_factor\_ms

(Int32) y\_acceleration\_Time\_ms: y\_acceleration\_Time\_ms

(Int32) y\_smooth\_factor\_ms: y\_smooth\_factor\_ms

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetJogAcceleration command which is used to Modify Jog acceleration. Refer to the XPS Programmer's manual to get the command description.

### GetJogAcceleration

#### Syntax

##### C# prototype

int GetJogAcceleration(out Int32 x\_acceleration\_Time\_ms, out Int32 x\_smooth\_factor\_ms, out Int32 y\_acceleration\_Time\_ms, out Int32 y\_smooth\_factor\_ms, out string errstring)

##### Python prototype

[x\_acceleration\_Time\_ms, x\_smooth\_factor\_ms, y\_acceleration\_Time\_ms, y\_smooth\_factor\_ms, errstring] GetJogAcceleration ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) x\_acceleration\_Time\_ms: x\_acceleration\_Time\_ms

(Int32\_i) x\_smooth\_factor\_ms: x\_smooth\_factor\_ms

(Int32\_i) y\_acceleration\_Time\_ms: y\_acceleration\_Time\_ms

(Int32\_i) y\_smooth\_factor\_ms: y\_smooth\_factor\_ms

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetJogAcceleration command which is used to Get Jog acceleration. Refer to the XPS Programmer's manual to get the command description.

### StartJog

#### Syntax

##### C# prototype

int StartJog( out string errstring)

##### Python prototype

[errstring] StartJog ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous StartJog command which is used to Enable Jog mode. Refer to the XPS Programmer's manual to get the command description.

### EndJog

#### Syntax

##### C# prototype

int EndJog( out string errstring)

##### Python prototype

[errstring] EndJog ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EndJog command which is used to Disable Jog mode. Refer to the XPS Programmer's manual to get the command description.

### GetCurrentPosition

#### Syntax

##### C# prototype

int GetCurrentPosition(out double y\_position\_um, out double x\_position\_um, out Int32 x1\_position\_cnts, out Int32 x2\_position\_cnts, out Int32 y\_laser\_position\_cnts, out Int32 x\_laser\_position\_cnts, out string errstring)

##### Python prototype

[y\_position\_um, x\_position\_um, x1\_position\_cnts, x2\_position\_cnts, y\_laser\_position\_cnts, x\_laser\_position\_cnts, errstring] GetCurrentPosition ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) y\_position\_um: y\_position\_um

(double) x\_position\_um: x\_position\_um

(Int32\_i) x1\_position\_cnts: x1\_position\_cnts

(Int32\_i) x2\_position\_cnts: x2\_position\_cnts

(Int32\_i) y\_laser\_position\_cnts: y\_laser\_position\_cnts

(Int32\_i) x\_laser\_position\_cnts: x\_laser\_position\_cnts

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetCurrentPosition command which is used to Read current positions. Refer to the XPS Programmer's manual to get the command description.

### SetZone

#### Syntax

##### C# prototype

int SetZone(double x\_center\_um, double y\_center\_um, double radius\_um, double hysteresis\_um, out string errstring)

##### Python prototype

[errstring] SetZone (x\_center\_um, y\_center\_um, radius\_um, hysteresis\_um)

#### Parameters

##### Input parameters

(double) x\_center\_um: x\_center\_um

(double) y\_center\_um: y\_center\_um

(double) radius\_um: radius\_um

(double) hysteresis\_um: hysteresis\_um

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetZone command which is used to Set Zone - output signal when inside a circle. Refer to the XPS Programmer's manual to get the command description.

### GetZone

#### Syntax

##### C# prototype

int GetZone(out double x\_center\_um, out double y\_center\_um, out double radius\_um, out double hysteresis\_um, out string errstring)

##### Python prototype

[x\_center\_um, y\_center\_um, radius\_um, hysteresis\_um, errstring] GetZone ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) x\_center\_um: x\_center\_um

(double) y\_center\_um: y\_center\_um

(double) radius\_um: radius\_um

(double) hysteresis\_um: hysteresis\_um

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetZone command which is used to Get Zone parameters. Refer to the XPS Programmer's manual to get the command description.

### SetVarX

#### Syntax

##### C# prototype

int SetVarX(string NameParameter, double value, out string errstring)

##### Python prototype

[errstring] SetVarX (NameParameter, value)

#### Parameters

##### Input parameters

(string) NameParameter: NameParameter

(double) value: value

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetVarX command which is used to Set var parameter for X. Refer to the XPS Programmer's manual to get the command description.

### SetVarXSecondary

#### Syntax

##### C# prototype

int SetVarXSecondary(string NameParameter, double value, out string errstring)

##### Python prototype

[errstring] SetVarXSecondary (NameParameter, value)

#### Parameters

##### Input parameters

(string) NameParameter: NameParameter

(double) value: value

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetVarXSecondary command which is used to Set var parameter X secondary. Refer to the XPS Programmer's manual to get the command description.

### SetVarY

#### Syntax

##### C# prototype

int SetVarY(string NameParameter, double value, out string errstring)

##### Python prototype

[errstring] SetVarY (NameParameter, value)

#### Parameters

##### Input parameters

(string) NameParameter: NameParameter

(double) value: value

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetVarY command which is used to Set var parameter for Y. Refer to the XPS Programmer's manual to get the command description.

### GetVarX

#### Syntax

##### C# prototype

int GetVarX(string NameParameter, out double value, out string errstring)

##### Python prototype

[value, errstring] GetVarX (NameParameter)

#### Parameters

##### Input parameters

(string) NameParameter: NameParameter

##### Output parameters

(double) value: value

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetVarX command which is used to Get var parameter for X. Refer to the XPS Programmer's manual to get the command description.

### GetVarXSecondary

#### Syntax

##### C# prototype

int GetVarXSecondary(string NameParameter, out double value, out string errstring)

##### Python prototype

[value, errstring] GetVarXSecondary (NameParameter)

#### Parameters

##### Input parameters

(string) NameParameter: NameParameter

##### Output parameters

(double) value: value

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetVarXSecondary command which is used to Get var parameter X secondary. Refer to the XPS Programmer's manual to get the command description.

### GetVarY

#### Syntax

##### C# prototype

int GetVarY(string NameParameter, out double value, out string errstring)

##### Python prototype

[value, errstring] GetVarY (NameParameter)

#### Parameters

##### Input parameters

(string) NameParameter: NameParameter

##### Output parameters

(double) value: value

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetVarY command which is used to Get var parameter for Y. Refer to the XPS Programmer's manual to get the command description.

### DataCollectionBufferReset

#### Syntax

##### C# prototype

int DataCollectionBufferReset( out string errstring)

##### Python prototype

[errstring] DataCollectionBufferReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DataCollectionBufferReset command which is used to Reset data collection buffer. Refer to the XPS Programmer's manual to get the command description.

### DataCollectionBufferAndTimeReset

#### Syntax

##### C# prototype

int DataCollectionBufferAndTimeReset( out string errstring)

##### Python prototype

[errstring] DataCollectionBufferAndTimeReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DataCollectionBufferAndTimeReset command which is used to Reset data collection buffer and time stamp. Refer to the XPS Programmer's manual to get the command description.

### DataCollectionRequest

#### Syntax

##### C# prototype

int DataCollectionRequest(Int32 NbRequestBlocks, out Int32 NbReturnBlocks, out string Frame, out string errstring)

##### Python prototype

[NbReturnBlocks, Frame, errstring] DataCollectionRequest (NbRequestBlocks)

#### Parameters

##### Input parameters

(Int32) NbRequestBlocks: NbRequestBlocks

##### Output parameters

(Int32\_i) NbReturnBlocks: NbReturnBlocks

(string) Frame: Frame

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DataCollectionRequest command which is used to Get data collection . Refer to the XPS Programmer's manual to get the command description.

### DataCollectionTimeStampGet

#### Syntax

##### C# prototype

int DataCollectionTimeStampGet(out double TimeStamp, out string errstring)

##### Python prototype

[TimeStamp, errstring] DataCollectionTimeStampGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) TimeStamp: TimeStamp

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DataCollectionTimeStampGet command which is used to Get data collection time stamp. Refer to the XPS Programmer's manual to get the command description.

### DataCollectionTimeStampReset

#### Syntax

##### C# prototype

int DataCollectionTimeStampReset( out string errstring)

##### Python prototype

[errstring] DataCollectionTimeStampReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DataCollectionTimeStampReset command which is used to Reset data collection time stamp. Refer to the XPS Programmer's manual to get the command description.

### SetPiston

#### Syntax

##### C# prototype

int SetPiston(Int32 Command, out string errstring)

##### Python prototype

[errstring] SetPiston (Command)

#### Parameters

##### Input parameters

(Int32) Command: Command

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetPiston command which is used to Set Piston command . Refer to the XPS Programmer's manual to get the command description.

### GetPistonState

#### Syntax

##### C# prototype

int GetPistonState(out Int32 CommandState, out Int32 isEngaged, out Int32 isReleased, out Int32 LiftPinUPInterlock, out string errstring)

##### Python prototype

[CommandState, isEngaged, isReleased, LiftPinUPInterlock, errstring] GetPistonState ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) CommandState: CommandState

(Int32\_i) isEngaged: isEngaged

(Int32\_i) isReleased: isReleased

(Int32\_i) LiftPinUPInterlock: LiftPinUPInterlock

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetPistonState command which is used to Get Piston State. Refer to the XPS Programmer's manual to get the command description.

### SetBrake

#### Syntax

##### C# prototype

int SetBrake(Int32 Command, out string errstring)

##### Python prototype

[errstring] SetBrake (Command)

#### Parameters

##### Input parameters

(Int32) Command: Command

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SetBrake command which is used to Set Brake command . Refer to the XPS Programmer's manual to get the command description.

### GetBrakeState

#### Syntax

##### C# prototype

int GetBrakeState(out Int32 CommandState, out string errstring)

##### Python prototype

[CommandState, errstring] GetBrakeState ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) CommandState: CommandState

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GetBrakeState command which is used to Get Brake State . Refer to the XPS Programmer's manual to get the command description.

### ZygoGetVerInterfero

#### Syntax

##### C# prototype

int ZygoGetVerInterfero(out string Version, out string errstring)

##### Python prototype

[Version, errstring] ZygoGetVerInterfero ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Version: Version

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoGetVerInterfero command which is used to Return Interferometer firmware version. Refer to the XPS Programmer's manual to get the command description.

### ZygoAmplitudeGet

#### Syntax

##### C# prototype

int ZygoAmplitudeGet(out Int32 ZygoReferenceSignalStatus, out Int32 Meas1Signal, out Int32 Meas2Signal, out string errstring)

##### Python prototype

[ZygoReferenceSignalStatus, Meas1Signal, Meas2Signal, errstring] ZygoAmplitudeGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) ZygoReferenceSignalStatus: ZygoReferenceSignalStatus

(Int32\_i) Meas1Signal: Meas1Signal

(Int32\_i) Meas2Signal: Meas2Signal

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoAmplitudeGet command which is used to Get the reference channel status and measuring channel amplitude. Refer to the XPS Programmer's manual to get the command description.

### ZygoADCDiagnosticStatusGet

#### Syntax

##### C# prototype

int ZygoADCDiagnosticStatusGet(Int32 axis, Int32 ADCMuxNumber, out string ADCDiagStatus, out string errstring)

##### Python prototype

[ADCDiagStatus, errstring] ZygoADCDiagnosticStatusGet (axis, ADCMuxNumber)

#### Parameters

##### Input parameters

(Int32) axis: axis

(Int32) ADCMuxNumber: ADCMuxNumber

##### Output parameters

(string) ADCDiagStatus: ADCDiagStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoADCDiagnosticStatusGet command which is used to Get the diagnostic ADC status. Refer to the XPS Programmer's manual to get the command description.

### ZygoPositionGet

#### Syntax

##### C# prototype

int ZygoPositionGet(out Int64 PositionY, out Int64 PositionX, out string errstring)

##### Python prototype

[PositionY, PositionX, errstring] ZygoPositionGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int64) PositionY: PositionY

(Int64) PositionX: PositionX

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoPositionGet command which is used to Return Zygo Interferometer positions. Refer to the XPS Programmer's manual to get the command description.

### ZygoResetX

#### Syntax

##### C# prototype

int ZygoResetX( out string errstring)

##### Python prototype

[errstring] ZygoResetX ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoResetX command which is used to Reset interferometer axis relates to axis X. Refer to the XPS Programmer's manual to get the command description.

### ZygoResetY

#### Syntax

##### C# prototype

int ZygoResetY( out string errstring)

##### Python prototype

[errstring] ZygoResetY ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoResetY command which is used to Reset interferometer axis relates to axis Y. Refer to the XPS Programmer's manual to get the command description.

### ZygoSetOffsetX

#### Syntax

##### C# prototype

int ZygoSetOffsetX(Int32 offset\_x, out string errstring)

##### Python prototype

[errstring] ZygoSetOffsetX (offset\_x)

#### Parameters

##### Input parameters

(Int32) offset\_x: offset\_x

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoSetOffsetX command which is used to Write the offset register of interferometer relates to axis X. Refer to the XPS Programmer's manual to get the command description.

### ZygoSetOffsetY

#### Syntax

##### C# prototype

int ZygoSetOffsetY(Int32 offset\_y, out string errstring)

##### Python prototype

[errstring] ZygoSetOffsetY (offset\_y)

#### Parameters

##### Input parameters

(Int32) offset\_y: offset\_y

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoSetOffsetY command which is used to Write the offset register of interferometer relates to axis Y. Refer to the XPS Programmer's manual to get the command description.

### ZygoSetPEGParams

#### Syntax

##### C# prototype

int ZygoSetPEGParams(Int32 P1, Int32 P2, UInt32 delta1, Int32 K1, UInt32 delta2, Int32 K2, Int32 ControlWord, out string errstring)

##### Python prototype

[errstring] ZygoSetPEGParams (P1, P2, delta1, K1, delta2, K2, ControlWord)

#### Parameters

##### Input parameters

(Int32) P1: P1

(Int32) P2: P2

(UInt32) delta1: delta1

(Int32) K1: K1

(UInt32) delta2: delta2

(Int32) K2: K2

(Int32) ControlWord: ControlWord

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoSetPEGParams command which is used to Write these parameters from Zygo interferometer. Refer to the XPS Programmer's manual to get the command description.

### ZygoGetPEGLastCommunicationTime

#### Syntax

##### C# prototype

int ZygoGetPEGLastCommunicationTime(out double LastCommunicationTime, out string errstring)

##### Python prototype

[LastCommunicationTime, errstring] ZygoGetPEGLastCommunicationTime ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) LastCommunicationTime: LastCommunicationTime

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoGetPEGLastCommunicationTime command which is used to Get the last communication time to configure Zygo PEG. Refer to the XPS Programmer's manual to get the command description.

### FirmwareVersionGet

#### Syntax

##### C# prototype

int FirmwareVersionGet(out string Version, out string errstring)

##### Python prototype

[Version, errstring] FirmwareVersionGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Version: Version

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous FirmwareVersionGet command which is used to Return firmware version from firmware.ref. Refer to the XPS Programmer's manual to get the command description.

### FirmwareBuildVersionNumberGet

#### Syntax

##### C# prototype

int FirmwareBuildVersionNumberGet(out string Version, out string errstring)

##### Python prototype

[Version, errstring] FirmwareBuildVersionNumberGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Version: Version

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous FirmwareBuildVersionNumberGet command which is used to Return firmware build version number. Refer to the XPS Programmer's manual to get the command description.

### InstallerVersionGet

#### Syntax

##### C# prototype

int InstallerVersionGet(out string Version, out string errstring)

##### Python prototype

[Version, errstring] InstallerVersionGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Version: Version

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous InstallerVersionGet command which is used to Return installer pack version. Refer to the XPS Programmer's manual to get the command description.

### Reboot

#### Syntax

##### C# prototype

int Reboot( out string errstring)

##### Python prototype

[errstring] Reboot ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous Reboot command which is used to Reboot the controller. Refer to the XPS Programmer's manual to get the command description.

### RestartApplication

#### Syntax

##### C# prototype

int RestartApplication( out string errstring)

##### Python prototype

[errstring] RestartApplication ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous RestartApplication command which is used to Restart the Controller. Refer to the XPS Programmer's manual to get the command description.

### ControllerMotionKernelTimeLoadGet

#### Syntax

##### C# prototype

int ControllerMotionKernelTimeLoadGet(out double CPUTotalLoadRatio, out double CPUCorrectorLoadRatio, out double CPUProfilerLoadRatio, out double CPUServitudesLoadRatio, out string errstring)

##### Python prototype

[CPUTotalLoadRatio, CPUCorrectorLoadRatio, CPUProfilerLoadRatio, CPUServitudesLoadRatio, errstring] ControllerMotionKernelTimeLoadGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) CPUTotalLoadRatio: CPUTotalLoadRatio

(double) CPUCorrectorLoadRatio: CPUCorrectorLoadRatio

(double) CPUProfilerLoadRatio: CPUProfilerLoadRatio

(double) CPUServitudesLoadRatio: CPUServitudesLoadRatio

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerMotionKernelTimeLoadGet command which is used to Get controller motion kernel time load. Refer to the XPS Programmer's manual to get the command description.

### ControllerRTTimeGet

#### Syntax

##### C# prototype

int ControllerRTTimeGet(out double CurrentRTPeriod, out double CurrentRTUsage, out string errstring)

##### Python prototype

[CurrentRTPeriod, CurrentRTUsage, errstring] ControllerRTTimeGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) CurrentRTPeriod: CurrentRTPeriod

(double) CurrentRTUsage: CurrentRTUsage

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerRTTimeGet command which is used to Get controller corrector period and calculation time. Refer to the XPS Programmer's manual to get the command description.

### ControllerSlaveStatusGet

#### Syntax

##### C# prototype

int ControllerSlaveStatusGet(out Int32 SlaveControllerStatus, out string errstring)

##### Python prototype

[SlaveControllerStatus, errstring] ControllerSlaveStatusGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) SlaveControllerStatus: SlaveControllerStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerSlaveStatusGet command which is used to Read slave controller status. Refer to the XPS Programmer's manual to get the command description.

### ControllerSlaveStatusStringGet

#### Syntax

##### C# prototype

int ControllerSlaveStatusStringGet(Int32 SlaveControllerStatusCode, out string SlaveControllerStatusString, out string errstring)

##### Python prototype

[SlaveControllerStatusString, errstring] ControllerSlaveStatusStringGet (SlaveControllerStatusCode)

#### Parameters

##### Input parameters

(Int32) SlaveControllerStatusCode: SlaveControllerStatusCode

##### Output parameters

(string) SlaveControllerStatusString: SlaveControllerStatusString

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerSlaveStatusStringGet command which is used to Return the slave controller status string. Refer to the XPS Programmer's manual to get the command description.

### ControllerSynchronizeCorrectorISR

#### Syntax

##### C# prototype

int ControllerSynchronizeCorrectorISR(string ModeString, out string errstring)

##### Python prototype

[errstring] ControllerSynchronizeCorrectorISR (ModeString)

#### Parameters

##### Input parameters

(string) ModeString: ModeString

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerSynchronizeCorrectorISR command which is used to Synchronize controller corrector ISR. Refer to the XPS Programmer's manual to get the command description.

### ControllerStatusGet

#### Syntax

##### C# prototype

int ControllerStatusGet(out Int32 ControllerStatus, out string errstring)

##### Python prototype

[ControllerStatus, errstring] ControllerStatusGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) ControllerStatus: ControllerStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerStatusGet command which is used to Get controller current status and reset the status. Refer to the XPS Programmer's manual to get the command description.

### ControllerStatusRead

#### Syntax

##### C# prototype

int ControllerStatusRead(out Int32 ControllerStatus, out string errstring)

##### Python prototype

[ControllerStatus, errstring] ControllerStatusRead ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) ControllerStatus: ControllerStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerStatusRead command which is used to Read controller current status. Refer to the XPS Programmer's manual to get the command description.

### ControllerStatusStringGet

#### Syntax

##### C# prototype

int ControllerStatusStringGet(Int32 ControllerStatusCode, out string ControllerStatusString, out string errstring)

##### Python prototype

[ControllerStatusString, errstring] ControllerStatusStringGet (ControllerStatusCode)

#### Parameters

##### Input parameters

(Int32) ControllerStatusCode: ControllerStatusCode

##### Output parameters

(string) ControllerStatusString: ControllerStatusString

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerStatusStringGet command which is used to Return the controller status string. Refer to the XPS Programmer's manual to get the command description.

### ElapsedTimeGet

#### Syntax

##### C# prototype

int ElapsedTimeGet(out double ElapsedTime, out string errstring)

##### Python prototype

[ElapsedTime, errstring] ElapsedTimeGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) ElapsedTime: ElapsedTime

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ElapsedTimeGet command which is used to Return elapsed time from controller power on. Refer to the XPS Programmer's manual to get the command description.

### ErrorStringGet

#### Syntax

##### C# prototype

int ErrorStringGet(Int32 ErrorCode, out string ErrorString, out string errstring)

##### Python prototype

[ErrorString, errstring] ErrorStringGet (ErrorCode)

#### Parameters

##### Input parameters

(Int32) ErrorCode: ErrorCode

##### Output parameters

(string) ErrorString: ErrorString

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ErrorStringGet command which is used to Return the error string corresponding to the error code. Refer to the XPS Programmer's manual to get the command description.

### Login

#### Syntax

##### C# prototype

int Login(string Name, string Password, out string errstring)

##### Python prototype

[errstring] Login (Name, Password)

#### Parameters

##### Input parameters

(string) Name: Name

(string) Password: Password

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous Login command which is used to Log in. Refer to the XPS Programmer's manual to get the command description.

### LoginS

#### Syntax

##### C# prototype

int LoginS(string Name, string CryptedPassword, out string errstring)

##### Python prototype

[errstring] LoginS (Name, CryptedPassword)

#### Parameters

##### Input parameters

(string) Name: Name

(string) CryptedPassword: CryptedPassword

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous LoginS command which is used to Log in . Refer to the XPS Programmer's manual to get the command description.

### CloseAllOtherSockets

#### Syntax

##### C# prototype

int CloseAllOtherSockets( out string errstring)

##### Python prototype

[errstring] CloseAllOtherSockets ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous CloseAllOtherSockets command which is used to Close all socket beside the one used to send this command. Refer to the XPS Programmer's manual to get the command description.

### HardwareDriverAndStageGet

#### Syntax

##### C# prototype

int HardwareDriverAndStageGet(Int32 PlugNumber, out string DriverName, out string StageName, out string errstring)

##### Python prototype

[DriverName, StageName, errstring] HardwareDriverAndStageGet (PlugNumber)

#### Parameters

##### Input parameters

(Int32) PlugNumber: PlugNumber

##### Output parameters

(string) DriverName: DriverName

(string) StageName: StageName

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous HardwareDriverAndStageGet command which is used to Smart hardware. Refer to the XPS Programmer's manual to get the command description.

### HardwareDateAndTimeGet

#### Syntax

##### C# prototype

int HardwareDateAndTimeGet(out string DateAndTime, out string errstring)

##### Python prototype

[DateAndTime, errstring] HardwareDateAndTimeGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) DateAndTime: DateAndTime

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous HardwareDateAndTimeGet command which is used to Return hardware date and time. Refer to the XPS Programmer's manual to get the command description.

### HardwareDateAndTimeSet

#### Syntax

##### C# prototype

int HardwareDateAndTimeSet(string DateAndTime, out string errstring)

##### Python prototype

[errstring] HardwareDateAndTimeSet (DateAndTime)

#### Parameters

##### Input parameters

(string) DateAndTime: DateAndTime

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous HardwareDateAndTimeSet command which is used to Set hardware date and time. Refer to the XPS Programmer's manual to get the command description.

### FileScriptHistoryRename

#### Syntax

##### C# prototype

int FileScriptHistoryRename(string TCLFileName, out string errstring)

##### Python prototype

[errstring] FileScriptHistoryRename (TCLFileName)

#### Parameters

##### Input parameters

(string) TCLFileName: TCLFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous FileScriptHistoryRename command which is used to Rename History.tcl. Refer to the XPS Programmer's manual to get the command description.

### FileGatheringRename

#### Syntax

##### C# prototype

int FileGatheringRename(string FileName, out string errstring)

##### Python prototype

[errstring] FileGatheringRename (FileName)

#### Parameters

##### Input parameters

(string) FileName: FileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous FileGatheringRename command which is used to Rename Gathering.dat. Refer to the XPS Programmer's manual to get the command description.

### INTServitudesStatusGet

#### Syntax

##### C# prototype

int INTServitudesStatusGet(out Int16 INTServitudesStatus, out string errstring)

##### Python prototype

[INTServitudesStatus, errstring] INTServitudesStatusGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int16) INTServitudesStatus: INTServitudesStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous INTServitudesStatusGet command which is used to Read INT servitudes status. Refer to the XPS Programmer's manual to get the command description.

### INTServitudesCommandGet

#### Syntax

##### C# prototype

int INTServitudesCommandGet(out Int16 INTServitudesCommand, out string errstring)

##### Python prototype

[INTServitudesCommand, errstring] INTServitudesCommandGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int16) INTServitudesCommand: INTServitudesCommand

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous INTServitudesCommandGet command which is used to Read INT servitudes command. Refer to the XPS Programmer's manual to get the command description.

### TCLScriptExecute

#### Syntax

##### C# prototype

int TCLScriptExecute(string TCLFileName, string TaskName, string ParametersList, out string errstring)

##### Python prototype

[errstring] TCLScriptExecute (TCLFileName, TaskName, ParametersList)

#### Parameters

##### Input parameters

(string) TCLFileName: TCLFileName

(string) TaskName: TaskName

(string) ParametersList: ParametersList

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TCLScriptExecute command which is used to Execute a TCL script from a TCL file. Refer to the XPS Programmer's manual to get the command description.

### TCLScriptExecuteAndWait

#### Syntax

##### C# prototype

int TCLScriptExecuteAndWait(string TCLFileName, string TaskName, string InputParametersList, out string OutputParametersList, out string errstring)

##### Python prototype

[OutputParametersList, errstring] TCLScriptExecuteAndWait (TCLFileName, TaskName, InputParametersList)

#### Parameters

##### Input parameters

(string) TCLFileName: TCLFileName

(string) TaskName: TaskName

(string) InputParametersList: InputParametersList

##### Output parameters

(string) OutputParametersList: OutputParametersList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TCLScriptExecuteAndWait command which is used to Execute a TCL script from a TCL file and wait the end of execution to return. Refer to the XPS Programmer's manual to get the command description.

### TCLScriptExecuteWithPriority

#### Syntax

##### C# prototype

int TCLScriptExecuteWithPriority(string TCLFileName, string TaskName, string TaskPriorityLevel, string ParametersList, out string errstring)

##### Python prototype

[errstring] TCLScriptExecuteWithPriority (TCLFileName, TaskName, TaskPriorityLevel, ParametersList)

#### Parameters

##### Input parameters

(string) TCLFileName: TCLFileName

(string) TaskName: TaskName

(string) TaskPriorityLevel: TaskPriorityLevel

(string) ParametersList: ParametersList

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TCLScriptExecuteWithPriority command which is used to Execute a TCL script with defined priority. Refer to the XPS Programmer's manual to get the command description.

### TCLScriptKill

#### Syntax

##### C# prototype

int TCLScriptKill(string TaskName, out string errstring)

##### Python prototype

[errstring] TCLScriptKill (TaskName)

#### Parameters

##### Input parameters

(string) TaskName: TaskName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TCLScriptKill command which is used to Kill TCL Task. Refer to the XPS Programmer's manual to get the command description.

### TCLScriptKillAll

#### Syntax

##### C# prototype

int TCLScriptKillAll( out string errstring)

##### Python prototype

[errstring] TCLScriptKillAll ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TCLScriptKillAll command which is used to Kill all TCL Tasks. Refer to the XPS Programmer's manual to get the command description.

### TCLScriptRunningListGet

#### Syntax

##### C# prototype

int TCLScriptRunningListGet(out string TCLTaskList, out string errstring)

##### Python prototype

[TCLTaskList, errstring] TCLScriptRunningListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) TCLTaskList: TCLTaskList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TCLScriptRunningListGet command which is used to TCL task running list . Refer to the XPS Programmer's manual to get the command description.

### TimerGet

#### Syntax

##### C# prototype

int TimerGet(string TimerName, out Int32 FrequencyTicks, out string errstring)

##### Python prototype

[FrequencyTicks, errstring] TimerGet (TimerName)

#### Parameters

##### Input parameters

(string) TimerName: TimerName

##### Output parameters

(Int32\_i) FrequencyTicks: FrequencyTicks

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TimerGet command which is used to Get a timer. Refer to the XPS Programmer's manual to get the command description.

### TimerSet

#### Syntax

##### C# prototype

int TimerSet(string TimerName, Int32 FrequencyTicks, out string errstring)

##### Python prototype

[errstring] TimerSet (TimerName, FrequencyTicks)

#### Parameters

##### Input parameters

(string) TimerName: TimerName

(Int32) FrequencyTicks: FrequencyTicks

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TimerSet command which is used to Set a timer. Refer to the XPS Programmer's manual to get the command description.

### CleanTmpFolder

#### Syntax

##### C# prototype

int CleanTmpFolder( out string errstring)

##### Python prototype

[errstring] CleanTmpFolder ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous CleanTmpFolder command which is used to Clean Tmp folder. Refer to the XPS Programmer's manual to get the command description.

### CleanCoreDumpFolder

#### Syntax

##### C# prototype

int CleanCoreDumpFolder( out string errstring)

##### Python prototype

[errstring] CleanCoreDumpFolder ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous CleanCoreDumpFolder command which is used to Remove core files existing in /Admin/Public/CoreDump folder. Refer to the XPS Programmer's manual to get the command description.

### GlobalArrayGet

#### Syntax

##### C# prototype

int GlobalArrayGet(Int32 Number, out string ValueString, out string errstring)

##### Python prototype

[ValueString, errstring] GlobalArrayGet (Number)

#### Parameters

##### Input parameters

(Int32) Number: Number

##### Output parameters

(string) ValueString: ValueString

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GlobalArrayGet command which is used to Get global array value. Refer to the XPS Programmer's manual to get the command description.

### GlobalArraySet

#### Syntax

##### C# prototype

int GlobalArraySet(Int32 Number, string ValueString, out string errstring)

##### Python prototype

[errstring] GlobalArraySet (Number, ValueString)

#### Parameters

##### Input parameters

(Int32) Number: Number

(string) ValueString: ValueString

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GlobalArraySet command which is used to Set global array value. Refer to the XPS Programmer's manual to get the command description.

### DoubleGlobalArrayGet

#### Syntax

##### C# prototype

int DoubleGlobalArrayGet(Int32 Number, out double DoubleValue, out string errstring)

##### Python prototype

[DoubleValue, errstring] DoubleGlobalArrayGet (Number)

#### Parameters

##### Input parameters

(Int32) Number: Number

##### Output parameters

(double) DoubleValue: DoubleValue

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DoubleGlobalArrayGet command which is used to Get double global array value. Refer to the XPS Programmer's manual to get the command description.

### DoubleGlobalArraySet

#### Syntax

##### C# prototype

int DoubleGlobalArraySet(Int32 Number, double DoubleValue, out string errstring)

##### Python prototype

[errstring] DoubleGlobalArraySet (Number, DoubleValue)

#### Parameters

##### Input parameters

(Int32) Number: Number

(double) DoubleValue: DoubleValue

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DoubleGlobalArraySet command which is used to Set double global array value. Refer to the XPS Programmer's manual to get the command description.

### PositionerMagneticTrackPositionAtHomeGet

#### Syntax

##### C# prototype

int PositionerMagneticTrackPositionAtHomeGet(string PositionerName, out double MagneticTrackPositionMod2Pi, out string errstring)

##### Python prototype

[MagneticTrackPositionMod2Pi, errstring] PositionerMagneticTrackPositionAtHomeGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) MagneticTrackPositionMod2Pi: MagneticTrackPositionMod2Pi

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerMagneticTrackPositionAtHomeGet command which is used to Get magnetic track position at home in units. Refer to the XPS Programmer's manual to get the command description.

### PositionerMotorDualSinForceBalanceGet

#### Syntax

##### C# prototype

int PositionerMotorDualSinForceBalanceGet(string PositionerName, out double FirstMotorForceBalance, out double SecondMotorForceBalance, out string errstring)

##### Python prototype

[FirstMotorForceBalance, SecondMotorForceBalance, errstring] PositionerMotorDualSinForceBalanceGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) FirstMotorForceBalance: FirstMotorForceBalance

(double) SecondMotorForceBalance: SecondMotorForceBalance

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerMotorDualSinForceBalanceGet command which is used to Get dual sin motor force balance parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerMotorDualSinForceBalanceSet

#### Syntax

##### C# prototype

int PositionerMotorDualSinForceBalanceSet(string PositionerName, double FirstMotorForceBalance, double SecondMotorForceBalance, out string errstring)

##### Python prototype

[errstring] PositionerMotorDualSinForceBalanceSet (PositionerName, FirstMotorForceBalance, SecondMotorForceBalance)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) FirstMotorForceBalance: FirstMotorForceBalance

(double) SecondMotorForceBalance: SecondMotorForceBalance

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerMotorDualSinForceBalanceSet command which is used to Set dual sin motor force balance parameters. Refer to the XPS Programmer's manual to get the command description.

### ZygoConnectToServer

#### Syntax

##### C# prototype

int ZygoConnectToServer( out string errstring)

##### Python prototype

[errstring] ZygoConnectToServer ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoConnectToServer command which is used to Connect to Zygo TCP server. Refer to the XPS Programmer's manual to get the command description.

### ZygoReset

#### Syntax

##### C# prototype

int ZygoReset( out string errstring)

##### Python prototype

[errstring] ZygoReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoReset command which is used to Reset all Zygo axes. Refer to the XPS Programmer's manual to get the command description.

### ZygoReadWord

#### Syntax

##### C# prototype

int ZygoReadWord(string AxisNum, string Register, out string Response, out string errstring)

##### Python prototype

[Response, errstring] ZygoReadWord (AxisNum, Register)

#### Parameters

##### Input parameters

(string) AxisNum: AxisNum

(string) Register: Register

##### Output parameters

(string) Response: Response

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoReadWord command which is used to Read word size from Zygo register,enter AXIS1|2|3|4 and register offset. Refer to the XPS Programmer's manual to get the command description.

### ZygoReadLong

#### Syntax

##### C# prototype

int ZygoReadLong(string AxisNum, string Register, out string Response, out string errstring)

##### Python prototype

[Response, errstring] ZygoReadLong (AxisNum, Register)

#### Parameters

##### Input parameters

(string) AxisNum: AxisNum

(string) Register: Register

##### Output parameters

(string) Response: Response

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoReadLong command which is used to Read long size from Zygo register,enter AXIS1|2|3|4 and register offset. Refer to the XPS Programmer's manual to get the command description.

### ZygoWriteWord

#### Syntax

##### C# prototype

int ZygoWriteWord(string AxisNum, string Register, string Data, out string Response, out string errstring)

##### Python prototype

[Response, errstring] ZygoWriteWord (AxisNum, Register, Data)

#### Parameters

##### Input parameters

(string) AxisNum: AxisNum

(string) Register: Register

(string) Data: Data

##### Output parameters

(string) Response: Response

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoWriteWord command which is used to Read word size from Zygo register,enter AXIS1|2|3|4, register offset and data value. Refer to the XPS Programmer's manual to get the command description.

### ZygoWriteLong

#### Syntax

##### C# prototype

int ZygoWriteLong(string AxisNum, string Register, string Data, out string Response, out string errstring)

##### Python prototype

[Response, errstring] ZygoWriteLong (AxisNum, Register, Data)

#### Parameters

##### Input parameters

(string) AxisNum: AxisNum

(string) Register: Register

(string) Data: Data

##### Output parameters

(string) Response: Response

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoWriteLong command which is used to Read long size from Zygo register,enter AXIS1|2|3|4, register offset and data value. Refer to the XPS Programmer's manual to get the command description.

### ZygoSendAndReceive

#### Syntax

##### C# prototype

int ZygoSendAndReceive(string Command, out string Response, out string errstring)

##### Python prototype

[Response, errstring] ZygoSendAndReceive (Command)

#### Parameters

##### Input parameters

(string) Command: Command

##### Output parameters

(string) Response: Response

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoSendAndReceive command which is used to Send command to Zygo borad and receive response. Refer to the XPS Programmer's manual to get the command description.

### ZygoDisconnectFromServer

#### Syntax

##### C# prototype

int ZygoDisconnectFromServer( out string errstring)

##### Python prototype

[errstring] ZygoDisconnectFromServer ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoDisconnectFromServer command which is used to Disconnect from Zygo server. Refer to the XPS Programmer's manual to get the command description.

### ZygoEthernetCommunicationStatusGet

#### Syntax

##### C# prototype

int ZygoEthernetCommunicationStatusGet(out Int32 EthernetCommunicationStatus, out string errstring)

##### Python prototype

[EthernetCommunicationStatus, errstring] ZygoEthernetCommunicationStatusGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) EthernetCommunicationStatus: EthernetCommunicationStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoEthernetCommunicationStatusGet command which is used to Get the Ethernet Communication Status . Refer to the XPS Programmer's manual to get the command description.

### ZygoInterferometerStatusGet

#### Syntax

##### C# prototype

int ZygoInterferometerStatusGet(out Int32 EthernetCommunicationStatus, out Int32 ZygoAxis1MeasureSignal, out Int32 ZygoAxis2MeasureSignal, out Int32 ZygoReferenceSignalStatus, out Int32 ZygoP2BoardStatus, out string errstring)

##### Python prototype

[EthernetCommunicationStatus, ZygoAxis1MeasureSignal, ZygoAxis2MeasureSignal, ZygoReferenceSignalStatus, ZygoP2BoardStatus, errstring] ZygoInterferometerStatusGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) EthernetCommunicationStatus: EthernetCommunicationStatus

(Int32\_i) ZygoAxis1MeasureSignal: ZygoAxis1MeasureSignal

(Int32\_i) ZygoAxis2MeasureSignal: ZygoAxis2MeasureSignal

(Int32\_i) ZygoReferenceSignalStatus: ZygoReferenceSignalStatus

(Int32\_i) ZygoP2BoardStatus: ZygoP2BoardStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoInterferometerStatusGet command which is used to Get the ZYGO interferometer status. Refer to the XPS Programmer's manual to get the command description.

### ZygoStartInterferometer

#### Syntax

##### C# prototype

int ZygoStartInterferometer( out string errstring)

##### Python prototype

[errstring] ZygoStartInterferometer ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoStartInterferometer command which is used to Start ZYGO interferometer. Can take several minutes.. Refer to the XPS Programmer's manual to get the command description.

### ZygoStartBoardP2

#### Syntax

##### C# prototype

int ZygoStartBoardP2(Int32 Kv, Int32 Kp, bool ReverseDirectionSenseChannel1, bool ReverseDirectionSenseChannel2, Int32 DataAgeAdjust, out string errstring)

##### Python prototype

[errstring] ZygoStartBoardP2 (Kv, Kp, ReverseDirectionSenseChannel1, ReverseDirectionSenseChannel2, DataAgeAdjust)

#### Parameters

##### Input parameters

(Int32) Kv: Kv

(Int32) Kp: Kp

(bool) ReverseDirectionSenseChannel1: ReverseDirectionSenseChannel1

(bool) ReverseDirectionSenseChannel2: ReverseDirectionSenseChannel2

(Int32) DataAgeAdjust: DataAgeAdjust

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoStartBoardP2 command which is used to Get the Zygo Board P2 up. Refer to the XPS Programmer's manual to get the command description.

### ZygoErrorStatusStringGet

#### Syntax

##### C# prototype

int ZygoErrorStatusStringGet(Int32 axis, out string ErrorStatus, out string errstring)

##### Python prototype

[ErrorStatus, errstring] ZygoErrorStatusStringGet (axis)

#### Parameters

##### Input parameters

(Int32) axis: axis

##### Output parameters

(string) ErrorStatus: ErrorStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoErrorStatusStringGet command which is used to Return Zygo Interferometer Error Status description. Refer to the XPS Programmer's manual to get the command description.

### ZygoErrorStatusGet

#### Syntax

##### C# prototype

int ZygoErrorStatusGet(Int32 axis, out string ErrorStatus, out string errstring)

##### Python prototype

[ErrorStatus, errstring] ZygoErrorStatusGet (axis)

#### Parameters

##### Input parameters

(Int32) axis: axis

##### Output parameters

(string) ErrorStatus: ErrorStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoErrorStatusGet command which is used to Return Zygo Interferometer Error Status code. Refer to the XPS Programmer's manual to get the command description.

### ZygoStatusStringGet

#### Syntax

##### C# prototype

int ZygoStatusStringGet(Int32 axis, out string ErrorStatus, out string errstring)

##### Python prototype

[ErrorStatus, errstring] ZygoStatusStringGet (axis)

#### Parameters

##### Input parameters

(Int32) axis: axis

##### Output parameters

(string) ErrorStatus: ErrorStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoStatusStringGet command which is used to Return Zygo Interferometer Status description. Refer to the XPS Programmer's manual to get the command description.

### ZygoStatusGet

#### Syntax

##### C# prototype

int ZygoStatusGet(Int32 axis, out string ErrorStatus, out string errstring)

##### Python prototype

[ErrorStatus, errstring] ZygoStatusGet (axis)

#### Parameters

##### Input parameters

(Int32) axis: axis

##### Output parameters

(string) ErrorStatus: ErrorStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoStatusGet command which is used to Return Zygo Interferometer Status code. Refer to the XPS Programmer's manual to get the command description.

### ZygoRegisterSet

#### Syntax

##### C# prototype

int ZygoRegisterSet(string PositionerName, Int32 Register, Int32 Value, out string errstring)

##### Python prototype

[errstring] ZygoRegisterSet (PositionerName, Register, Value)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) Register: Register

(Int32) Value: Value

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoRegisterSet command which is used to . Refer to the XPS Programmer's manual to get the command description.

### ZygoRegisterGet

#### Syntax

##### C# prototype

int ZygoRegisterGet(string PositionerName, Int32 Register, out Int32 Value, out string errstring)

##### Python prototype

[Value, errstring] ZygoRegisterGet (PositionerName, Register)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) Register: Register

##### Output parameters

(Int32\_i) Value: Value

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ZygoRegisterGet command which is used to . Refer to the XPS Programmer's manual to get the command description.

### EventAdd

#### Syntax

##### C# prototype

int EventAdd(string PositionerName, string EventName, string EventParameter, string ActionName, string ActionParameter1, string ActionParameter2, string ActionParameter3, out string errstring)

##### Python prototype

[errstring] EventAdd (PositionerName, EventName, EventParameter, ActionName, ActionParameter1, ActionParameter2, ActionParameter3)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) EventName: EventName

(string) EventParameter: EventParameter

(string) ActionName: ActionName

(string) ActionParameter1: ActionParameter1

(string) ActionParameter2: ActionParameter2

(string) ActionParameter3: ActionParameter3

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventAdd command which is used to \*\* OBSOLETE \*\* Add an event. Refer to the XPS Programmer's manual to get the command description.

### EventGet

#### Syntax

##### C# prototype

int EventGet(string PositionerName, out string EventsAndActionsList, out string errstring)

##### Python prototype

[EventsAndActionsList, errstring] EventGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) EventsAndActionsList: EventsAndActionsList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventGet command which is used to \*\* OBSOLETE \*\* Read events and actions list. Refer to the XPS Programmer's manual to get the command description.

### EventRemove

#### Syntax

##### C# prototype

int EventRemove(string PositionerName, string EventName, string EventParameter, out string errstring)

##### Python prototype

[errstring] EventRemove (PositionerName, EventName, EventParameter)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) EventName: EventName

(string) EventParameter: EventParameter

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventRemove command which is used to \*\* OBSOLETE \*\* Delete an event. Refer to the XPS Programmer's manual to get the command description.

### EventWait

#### Syntax

##### C# prototype

int EventWait(string PositionerName, string EventName, string EventParameter, out string errstring)

##### Python prototype

[errstring] EventWait (PositionerName, EventName, EventParameter)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) EventName: EventName

(string) EventParameter: EventParameter

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventWait command which is used to \*\* OBSOLETE \*\* Wait an event. Refer to the XPS Programmer's manual to get the command description.

### EventExtendedConfigurationTriggerSet

#### Syntax

##### C# prototype

int EventExtendedConfigurationTriggerSet(string[] ExtendedEventName, string[] EventParameter1, string[] EventParameter2, string[] EventParameter3, string[] EventParameter4, out string errstring)

##### Python prototype

[errstring] EventExtendedConfigurationTriggerSet (ExtendedEventName, EventParameter1, EventParameter2, EventParameter3, EventParameter4)

#### Parameters

##### Input parameters

(string[]) ExtendedEventName: ExtendedEventName

(string[]) EventParameter1: EventParameter1

(string[]) EventParameter2: EventParameter2

(string[]) EventParameter3: EventParameter3

(string[]) EventParameter4: EventParameter4

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventExtendedConfigurationTriggerSet command which is used to Configure one or several events. Refer to the XPS Programmer's manual to get the command description.

### EventExtendedConfigurationTriggerGet

#### Syntax

##### C# prototype

int EventExtendedConfigurationTriggerGet(out string EventTriggerConfiguration, out string errstring)

##### Python prototype

[EventTriggerConfiguration, errstring] EventExtendedConfigurationTriggerGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) EventTriggerConfiguration: EventTriggerConfiguration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventExtendedConfigurationTriggerGet command which is used to Read the event configuration. Refer to the XPS Programmer's manual to get the command description.

### EventExtendedConfigurationActionSet

#### Syntax

##### C# prototype

int EventExtendedConfigurationActionSet(string[] ExtendedActionName, string[] ActionParameter1, string[] ActionParameter2, string[] ActionParameter3, string[] ActionParameter4, out string errstring)

##### Python prototype

[errstring] EventExtendedConfigurationActionSet (ExtendedActionName, ActionParameter1, ActionParameter2, ActionParameter3, ActionParameter4)

#### Parameters

##### Input parameters

(string[]) ExtendedActionName: ExtendedActionName

(string[]) ActionParameter1: ActionParameter1

(string[]) ActionParameter2: ActionParameter2

(string[]) ActionParameter3: ActionParameter3

(string[]) ActionParameter4: ActionParameter4

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventExtendedConfigurationActionSet command which is used to Configure one or several actions. Refer to the XPS Programmer's manual to get the command description.

### EventExtendedConfigurationActionGet

#### Syntax

##### C# prototype

int EventExtendedConfigurationActionGet(out string ActionConfiguration, out string errstring)

##### Python prototype

[ActionConfiguration, errstring] EventExtendedConfigurationActionGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) ActionConfiguration: ActionConfiguration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventExtendedConfigurationActionGet command which is used to Read the action configuration. Refer to the XPS Programmer's manual to get the command description.

### EventExtendedStart

#### Syntax

##### C# prototype

int EventExtendedStart(out Int32 ID, out string errstring)

##### Python prototype

[ID, errstring] EventExtendedStart ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) ID: ID

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventExtendedStart command which is used to Launch the last event and action configuration and return an ID. Refer to the XPS Programmer's manual to get the command description.

### EventExtendedAllGet

#### Syntax

##### C# prototype

int EventExtendedAllGet(out string EventActionConfigurations, out string errstring)

##### Python prototype

[EventActionConfigurations, errstring] EventExtendedAllGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) EventActionConfigurations: EventActionConfigurations

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventExtendedAllGet command which is used to Read all event and action configurations. Refer to the XPS Programmer's manual to get the command description.

### EventExtendedGet

#### Syntax

##### C# prototype

int EventExtendedGet(Int32 ID, out string EventTriggerConfiguration, out string ActionConfiguration, out string errstring)

##### Python prototype

[EventTriggerConfiguration, ActionConfiguration, errstring] EventExtendedGet (ID)

#### Parameters

##### Input parameters

(Int32) ID: ID

##### Output parameters

(string) EventTriggerConfiguration: EventTriggerConfiguration

(string) ActionConfiguration: ActionConfiguration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventExtendedGet command which is used to Read the event and action configuration defined by ID. Refer to the XPS Programmer's manual to get the command description.

### EventExtendedRemove

#### Syntax

##### C# prototype

int EventExtendedRemove(Int32 ID, out string errstring)

##### Python prototype

[errstring] EventExtendedRemove (ID)

#### Parameters

##### Input parameters

(Int32) ID: ID

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventExtendedRemove command which is used to Remove the event and action configuration defined by ID. Refer to the XPS Programmer's manual to get the command description.

### EventExtendedWait

#### Syntax

##### C# prototype

int EventExtendedWait( out string errstring)

##### Python prototype

[errstring] EventExtendedWait ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventExtendedWait command which is used to Wait events from the last event configuration. Refer to the XPS Programmer's manual to get the command description.

### GatheringConfigurationGet

#### Syntax

##### C# prototype

int GatheringConfigurationGet(out string Type, out string errstring)

##### Python prototype

[Type, errstring] GatheringConfigurationGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Type: Type

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringConfigurationGet command which is used to Read different mnemonique type. Refer to the XPS Programmer's manual to get the command description.

### GatheringConfigurationSet

#### Syntax

##### C# prototype

int GatheringConfigurationSet(string[] Type, out string errstring)

##### Python prototype

[errstring] GatheringConfigurationSet (Type)

#### Parameters

##### Input parameters

(string[]) Type: Type

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringConfigurationSet command which is used to Configuration acquisition. Refer to the XPS Programmer's manual to get the command description.

### GatheringCurrentNumberGet

#### Syntax

##### C# prototype

int GatheringCurrentNumberGet(out Int32 CurrentNumber, out Int32 MaximumSamplesNumber, out string errstring)

##### Python prototype

[CurrentNumber, MaximumSamplesNumber, errstring] GatheringCurrentNumberGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) CurrentNumber: CurrentNumber

(Int32\_i) MaximumSamplesNumber: MaximumSamplesNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringCurrentNumberGet command which is used to Maximum number of samples and current number during acquisition. Refer to the XPS Programmer's manual to get the command description.

### GatheringCurrentIndexGet

#### Syntax

##### C# prototype

int GatheringCurrentIndexGet(out Int32 CurrentIndex, out Int32 CurrentNumber, out string errstring)

##### Python prototype

[CurrentIndex, CurrentNumber, errstring] GatheringCurrentIndexGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) CurrentIndex: CurrentIndex

(Int32\_i) CurrentNumber: CurrentNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringCurrentIndexGet command which is used to Current index of the last acquisition and current number of acquisitions. Refer to the XPS Programmer's manual to get the command description.

### GatheringStopAndSave

#### Syntax

##### C# prototype

int GatheringStopAndSave( out string errstring)

##### Python prototype

[errstring] GatheringStopAndSave ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringStopAndSave command which is used to Stop acquisition and save data. Refer to the XPS Programmer's manual to get the command description.

### GatheringDataAcquire

#### Syntax

##### C# prototype

int GatheringDataAcquire( out string errstring)

##### Python prototype

[errstring] GatheringDataAcquire ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringDataAcquire command which is used to Acquire a configured data. Refer to the XPS Programmer's manual to get the command description.

### GatheringDataGet

#### Syntax

##### C# prototype

int GatheringDataGet(Int32 IndexPoint, out string DataBufferLine, out string errstring)

##### Python prototype

[DataBufferLine, errstring] GatheringDataGet (IndexPoint)

#### Parameters

##### Input parameters

(Int32) IndexPoint: IndexPoint

##### Output parameters

(string) DataBufferLine: DataBufferLine

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringDataGet command which is used to Get a data line from gathering buffer. Refer to the XPS Programmer's manual to get the command description.

### GatheringDataMultipleLinesGet

#### Syntax

##### C# prototype

int GatheringDataMultipleLinesGet(Int32 IndexPoint, Int32 NumberOfLines, out string DataBufferLine, out string errstring)

##### Python prototype

[DataBufferLine, errstring] GatheringDataMultipleLinesGet (IndexPoint, NumberOfLines)

#### Parameters

##### Input parameters

(Int32) IndexPoint: IndexPoint

(Int32) NumberOfLines: NumberOfLines

##### Output parameters

(string) DataBufferLine: DataBufferLine

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringDataMultipleLinesGet command which is used to Get multiple data lines from gathering buffer. Refer to the XPS Programmer's manual to get the command description.

### GatheringReset

#### Syntax

##### C# prototype

int GatheringReset( out string errstring)

##### Python prototype

[errstring] GatheringReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringReset command which is used to Empty the gathered data in memory to start new gathering from scratch. Refer to the XPS Programmer's manual to get the command description.

### GatheringRun

#### Syntax

##### C# prototype

int GatheringRun(Int32 DataNumber, Int32 Divisor, out string errstring)

##### Python prototype

[errstring] GatheringRun (DataNumber, Divisor)

#### Parameters

##### Input parameters

(Int32) DataNumber: DataNumber

(Int32) Divisor: Divisor

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringRun command which is used to Start a new gathering. Refer to the XPS Programmer's manual to get the command description.

### GatheringRunAppend

#### Syntax

##### C# prototype

int GatheringRunAppend( out string errstring)

##### Python prototype

[errstring] GatheringRunAppend ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringRunAppend command which is used to Re-start the stopped gathering to add new data. Refer to the XPS Programmer's manual to get the command description.

### GatheringStop

#### Syntax

##### C# prototype

int GatheringStop( out string errstring)

##### Python prototype

[errstring] GatheringStop ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringStop command which is used to Stop the data gathering . Refer to the XPS Programmer's manual to get the command description.

### GatheringExternalConfigurationSet

#### Syntax

##### C# prototype

int GatheringExternalConfigurationSet(string[] Type, out string errstring)

##### Python prototype

[errstring] GatheringExternalConfigurationSet (Type)

#### Parameters

##### Input parameters

(string[]) Type: Type

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringExternalConfigurationSet command which is used to Configuration acquisition. Refer to the XPS Programmer's manual to get the command description.

### GatheringExternalConfigurationGet

#### Syntax

##### C# prototype

int GatheringExternalConfigurationGet(out string Type, out string errstring)

##### Python prototype

[Type, errstring] GatheringExternalConfigurationGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Type: Type

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringExternalConfigurationGet command which is used to Read different mnemonique type. Refer to the XPS Programmer's manual to get the command description.

### GatheringExternalCurrentNumberGet

#### Syntax

##### C# prototype

int GatheringExternalCurrentNumberGet(out Int32 CurrentNumber, out Int32 MaximumSamplesNumber, out string errstring)

##### Python prototype

[CurrentNumber, MaximumSamplesNumber, errstring] GatheringExternalCurrentNumberGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) CurrentNumber: CurrentNumber

(Int32\_i) MaximumSamplesNumber: MaximumSamplesNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringExternalCurrentNumberGet command which is used to Maximum number of samples and current number during acquisition. Refer to the XPS Programmer's manual to get the command description.

### GatheringExternalDataGet

#### Syntax

##### C# prototype

int GatheringExternalDataGet(Int32 IndexPoint, out string DataBufferLine, out string errstring)

##### Python prototype

[DataBufferLine, errstring] GatheringExternalDataGet (IndexPoint)

#### Parameters

##### Input parameters

(Int32) IndexPoint: IndexPoint

##### Output parameters

(string) DataBufferLine: DataBufferLine

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringExternalDataGet command which is used to Get a data line from external gathering buffer. Refer to the XPS Programmer's manual to get the command description.

### GatheringExternalStopAndSave

#### Syntax

##### C# prototype

int GatheringExternalStopAndSave( out string errstring)

##### Python prototype

[errstring] GatheringExternalStopAndSave ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringExternalStopAndSave command which is used to Stop acquisition and save data. Refer to the XPS Programmer's manual to get the command description.

### GPIOAnalogGet

#### Syntax

##### C# prototype

int GPIOAnalogGet(string[] GPIOName, out double[] AnalogValue, out string errstring)

##### Python prototype

[AnalogValue, errstring] GPIOAnalogGet (GPIOName)

#### Parameters

##### Input parameters

(string[]) GPIOName: GPIOName

##### Output parameters

(double[]) AnalogValue: AnalogValue

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GPIOAnalogGet command which is used to Read analog input or analog output for one or few input. Refer to the XPS Programmer's manual to get the command description.

### GPIOAnalogSet

#### Syntax

##### C# prototype

int GPIOAnalogSet(string[] GPIOName, double[] AnalogOutputValue, out string errstring)

##### Python prototype

[errstring] GPIOAnalogSet (GPIOName, AnalogOutputValue)

#### Parameters

##### Input parameters

(string[]) GPIOName: GPIOName

(double[]) AnalogOutputValue: AnalogOutputValue

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GPIOAnalogSet command which is used to Set analog output for one or few output. Refer to the XPS Programmer's manual to get the command description.

### GPIOAnalogGainGet

#### Syntax

##### C# prototype

int GPIOAnalogGainGet(string[] GPIOName, out Int32[] AnalogInputGainValue, out string errstring)

##### Python prototype

[AnalogInputGainValue, errstring] GPIOAnalogGainGet (GPIOName)

#### Parameters

##### Input parameters

(string[]) GPIOName: GPIOName

##### Output parameters

(Int32\_i[]) AnalogInputGainValue: AnalogInputGainValue

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GPIOAnalogGainGet command which is used to Read user analog input gain 1, 2, 4 or 8, for one or few input. Refer to the XPS Programmer's manual to get the command description.

### GPIOAnalogGainSet

#### Syntax

##### C# prototype

int GPIOAnalogGainSet(string[] GPIOName, Int32[] AnalogInputGainValue, out string errstring)

##### Python prototype

[errstring] GPIOAnalogGainSet (GPIOName, AnalogInputGainValue)

#### Parameters

##### Input parameters

(string[]) GPIOName: GPIOName

(Int32) AnalogInputGainValue: AnalogInputGainValue

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GPIOAnalogGainSet command which is used to Set user analog input gain 1, 2, 4 or 8, for one or few input. Refer to the XPS Programmer's manual to get the command description.

### GPIOAnalogRangeConfigurationGet

#### Syntax

##### C# prototype

int GPIOAnalogRangeConfigurationGet(string GPIOName, out double DACRange, out string errstring)

##### Python prototype

[DACRange, errstring] GPIOAnalogRangeConfigurationGet (GPIOName)

#### Parameters

##### Input parameters

(string) GPIOName: GPIOName

##### Output parameters

(double) DACRange: DACRange

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GPIOAnalogRangeConfigurationGet command which is used to Get GPIO DAC range configuration for DAC . Refer to the XPS Programmer's manual to get the command description.

### GPIOAnalogRangeConfigurationSet

#### Syntax

##### C# prototype

int GPIOAnalogRangeConfigurationSet(string GPIOName, double DACRange, out string errstring)

##### Python prototype

[errstring] GPIOAnalogRangeConfigurationSet (GPIOName, DACRange)

#### Parameters

##### Input parameters

(string) GPIOName: GPIOName

(double) DACRange: DACRange

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GPIOAnalogRangeConfigurationSet command which is used to Set GPIO DAC range configuration for DAC . Refer to the XPS Programmer's manual to get the command description.

### GPIODigitalGet

#### Syntax

##### C# prototype

int GPIODigitalGet(string GPIOName, out UInt16 DigitalValue, out string errstring)

##### Python prototype

[DigitalValue, errstring] GPIODigitalGet (GPIOName)

#### Parameters

##### Input parameters

(string) GPIOName: GPIOName

##### Output parameters

(UInt16) DigitalValue: DigitalValue

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GPIODigitalGet command which is used to Read digital output or digital input . Refer to the XPS Programmer's manual to get the command description.

### GPIODigitalSet

#### Syntax

##### C# prototype

int GPIODigitalSet(string GPIOName, UInt16 Mask, UInt16 DigitalOutputValue, out string errstring)

##### Python prototype

[errstring] GPIODigitalSet (GPIOName, Mask, DigitalOutputValue)

#### Parameters

##### Input parameters

(string) GPIOName: GPIOName

(UInt16) Mask: Mask

(UInt16) DigitalOutputValue: DigitalOutputValue

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GPIODigitalSet command which is used to Set Digital Output for one or few output TTL. Refer to the XPS Programmer's manual to get the command description.

### GPIODigitalPulseWidthGet

#### Syntax

##### C# prototype

int GPIODigitalPulseWidthGet(string GPIOName, out double PulseWidth, out string errstring)

##### Python prototype

[PulseWidth, errstring] GPIODigitalPulseWidthGet (GPIOName)

#### Parameters

##### Input parameters

(string) GPIOName: GPIOName

##### Output parameters

(double) PulseWidth: PulseWidth

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GPIODigitalPulseWidthGet command which is used to Read current GPIO pulse width . Refer to the XPS Programmer's manual to get the command description.

### GPIODigitalPulseWidthSet

#### Syntax

##### C# prototype

int GPIODigitalPulseWidthSet(string GPIOName, double PulseWidth, out string errstring)

##### Python prototype

[errstring] GPIODigitalPulseWidthSet (GPIOName, PulseWidth)

#### Parameters

##### Input parameters

(string) GPIOName: GPIOName

(double) PulseWidth: PulseWidth

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GPIODigitalPulseWidthSet command which is used to Set GPIO pulse width . Refer to the XPS Programmer's manual to get the command description.

### GroupAccelerationCurrentGet

#### Syntax

##### C# prototype

int GroupAccelerationCurrentGet(string GroupName, out double[] CurrentAcceleration, Int32 nbItems, out string errstring)

##### Python prototype

[CurrentAcceleration, errstring] GroupAccelerationCurrentGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) CurrentAcceleration: CurrentAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupAccelerationCurrentGet command which is used to Return current acceleration. Refer to the XPS Programmer's manual to get the command description.

### GroupAccelerationSetpointGet

#### Syntax

##### C# prototype

int GroupAccelerationSetpointGet(string GroupName, out double[] SetpointAcceleration, Int32 nbItems, out string errstring)

##### Python prototype

[SetpointAcceleration, errstring] GroupAccelerationSetpointGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) SetpointAcceleration: SetpointAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupAccelerationSetpointGet command which is used to Return setpoint acceleration. Refer to the XPS Programmer's manual to get the command description.

### GroupAnalogTrackingModeEnable

#### Syntax

##### C# prototype

int GroupAnalogTrackingModeEnable(string GroupName, string Type, out string errstring)

##### Python prototype

[errstring] GroupAnalogTrackingModeEnable (GroupName, Type)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) Type: Type

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupAnalogTrackingModeEnable command which is used to Enable analog tracking mode. Refer to the XPS Programmer's manual to get the command description.

### GroupAnalogTrackingModeDisable

#### Syntax

##### C# prototype

int GroupAnalogTrackingModeDisable(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupAnalogTrackingModeDisable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupAnalogTrackingModeDisable command which is used to Disable analog tracking mode. Refer to the XPS Programmer's manual to get the command description.

### GroupCorrectorOutputGet

#### Syntax

##### C# prototype

int GroupCorrectorOutputGet(string GroupName, out double[] CorrectorOutput, Int32 nbItems, out string errstring)

##### Python prototype

[CorrectorOutput, errstring] GroupCorrectorOutputGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) CorrectorOutput: CorrectorOutput

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupCorrectorOutputGet command which is used to Return corrector output. Refer to the XPS Programmer's manual to get the command description.

### GroupCurrentFollowingErrorGet

#### Syntax

##### C# prototype

int GroupCurrentFollowingErrorGet(string GroupName, out double[] CurrentFollowingError, Int32 nbItems, out string errstring)

##### Python prototype

[CurrentFollowingError, errstring] GroupCurrentFollowingErrorGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) CurrentFollowingError: CurrentFollowingError

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupCurrentFollowingErrorGet command which is used to Return current following error. Refer to the XPS Programmer's manual to get the command description.

### GroupHomeSearch

#### Syntax

##### C# prototype

int GroupHomeSearch(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupHomeSearch (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupHomeSearch command which is used to Start home search sequence. Refer to the XPS Programmer's manual to get the command description.

### GroupHomeSearchAndRelativeMove

#### Syntax

##### C# prototype

int GroupHomeSearchAndRelativeMove(string GroupName, double[] TargetDisplacement, Int32 nbItems, out string errstring)

##### Python prototype

[errstring] GroupHomeSearchAndRelativeMove (GroupName, TargetDisplacement, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double[]) TargetDisplacement: TargetDisplacement

(Int32) nbItems: nbItems

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupHomeSearchAndRelativeMove command which is used to Start home search sequence and execute a displacement. Refer to the XPS Programmer's manual to get the command description.

### GroupInitialize

#### Syntax

##### C# prototype

int GroupInitialize(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupInitialize (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupInitialize command which is used to Start the initialization. Refer to the XPS Programmer's manual to get the command description.

### GroupInitializeNoEncoderReset

#### Syntax

##### C# prototype

int GroupInitializeNoEncoderReset(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupInitializeNoEncoderReset (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupInitializeNoEncoderReset command which is used to Initialize group without encoder reset. Refer to the XPS Programmer's manual to get the command description.

### GroupInitializeWithEncoderCalibration

#### Syntax

##### C# prototype

int GroupInitializeWithEncoderCalibration(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupInitializeWithEncoderCalibration (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupInitializeWithEncoderCalibration command which is used to Initialize group with encoder calibration. Refer to the XPS Programmer's manual to get the command description.

### GroupGantryModeGet

#### Syntax

##### C# prototype

int GroupGantryModeGet(string GroupName, out string Option, out string errstring)

##### Python prototype

[Option, errstring] GroupGantryModeGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) Option: Option

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupGantryModeGet command which is used to Return current group gantry mode . Refer to the XPS Programmer's manual to get the command description.

### GroupGantryModeSet

#### Syntax

##### C# prototype

int GroupGantryModeSet(string GroupName, string Option, out string errstring)

##### Python prototype

[errstring] GroupGantryModeSet (GroupName, Option)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) Option: Option

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupGantryModeSet command which is used to Set group gantry mode . Refer to the XPS Programmer's manual to get the command description.

### GroupInterlockDisable

#### Syntax

##### C# prototype

int GroupInterlockDisable(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupInterlockDisable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupInterlockDisable command which is used to Disable group interlock. Refer to the XPS Programmer's manual to get the command description.

### GroupInterlockEnable

#### Syntax

##### C# prototype

int GroupInterlockEnable(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupInterlockEnable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupInterlockEnable command which is used to Enable group interlock. Refer to the XPS Programmer's manual to get the command description.

### GroupJogParametersSet

#### Syntax

##### C# prototype

int GroupJogParametersSet(string GroupName, double[] Velocity, double[] Acceleration, Int32 nbItems, out string errstring)

##### Python prototype

[errstring] GroupJogParametersSet (GroupName, Velocity, Acceleration, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double[]) Velocity: Velocity

(double[]) Acceleration: Acceleration

(Int32) nbItems: nbItems

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupJogParametersSet command which is used to Change jog parameters and activate the modifications. Refer to the XPS Programmer's manual to get the command description.

### GroupJogParametersGet

#### Syntax

##### C# prototype

int GroupJogParametersGet(string GroupName, out double[] Velocity, out double[] Acceleration, Int32 nbItems, out string errstring)

##### Python prototype

[Velocity, Acceleration, errstring] GroupJogParametersGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) Velocity: Velocity

(double[]) Acceleration: Acceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupJogParametersGet command which is used to Get jog parameters. Refer to the XPS Programmer's manual to get the command description.

### GroupJogCurrentGet

#### Syntax

##### C# prototype

int GroupJogCurrentGet(string GroupName, out double[] Velocity, out double[] Acceleration, Int32 nbItems, out string errstring)

##### Python prototype

[Velocity, Acceleration, errstring] GroupJogCurrentGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) Velocity: Velocity

(double[]) Acceleration: Acceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupJogCurrentGet command which is used to Get current jog parameters. Refer to the XPS Programmer's manual to get the command description.

### GroupJogModeEnable

#### Syntax

##### C# prototype

int GroupJogModeEnable(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupJogModeEnable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupJogModeEnable command which is used to Enable jog mode. Refer to the XPS Programmer's manual to get the command description.

### GroupJogModeDisable

#### Syntax

##### C# prototype

int GroupJogModeDisable(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupJogModeDisable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupJogModeDisable command which is used to Disable jog mode. Refer to the XPS Programmer's manual to get the command description.

### GroupKill

#### Syntax

##### C# prototype

int GroupKill(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupKill (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupKill command which is used to Kill the group. Refer to the XPS Programmer's manual to get the command description.

### GroupMotionDisable

#### Syntax

##### C# prototype

int GroupMotionDisable(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupMotionDisable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupMotionDisable command which is used to Disable motion. Refer to the XPS Programmer's manual to get the command description.

### GroupMotionEnable

#### Syntax

##### C# prototype

int GroupMotionEnable(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupMotionEnable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupMotionEnable command which is used to Enable motion. Refer to the XPS Programmer's manual to get the command description.

### GroupMotionStatusGet

#### Syntax

##### C# prototype

int GroupMotionStatusGet(string GroupName, out Int32[] Status, Int32 nbItems, out string errstring)

##### Python prototype

[Status, errstring] GroupMotionStatusGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(Int32\_i[]) Status: Status

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupMotionStatusGet command which is used to Get group or positioner status. Refer to the XPS Programmer's manual to get the command description.

### GroupMoveAbort

#### Syntax

##### C# prototype

int GroupMoveAbort(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupMoveAbort (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupMoveAbort command which is used to Abort move. Refer to the XPS Programmer's manual to get the command description.

### GroupMoveAbortFast

#### Syntax

##### C# prototype

int GroupMoveAbortFast(string GroupName, Int32 AccelerationMultiplier, out string errstring)

##### Python prototype

[errstring] GroupMoveAbortFast (GroupName, AccelerationMultiplier)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) AccelerationMultiplier: AccelerationMultiplier

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupMoveAbortFast command which is used to Abort quickly a move. Refer to the XPS Programmer's manual to get the command description.

### GroupMoveAbsolute

#### Syntax

##### C# prototype

int GroupMoveAbsolute(string GroupName, double[] TargetPosition, Int32 nbItems, out string errstring)

##### Python prototype

[errstring] GroupMoveAbsolute (GroupName, TargetPosition, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double[]) TargetPosition: TargetPosition

(Int32) nbItems: nbItems

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupMoveAbsolute command which is used to Do an absolute move. Refer to the XPS Programmer's manual to get the command description.

### GroupMoveEndWait

#### Syntax

##### C# prototype

int GroupMoveEndWait(string GroupName, double TimeOutMs, double XPosition, double YPosition, out string errstring)

##### Python prototype

[errstring] GroupMoveEndWait (GroupName, TimeOutMs, XPosition, YPosition)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) TimeOutMs: TimeOutMs

(double) XPosition: XPosition

(double) YPosition: YPosition

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupMoveEndWait command which is used to Wait the end of motion. Refer to the XPS Programmer's manual to get the command description.

### GroupMoveRelative

#### Syntax

##### C# prototype

int GroupMoveRelative(string GroupName, double[] TargetDisplacement, Int32 nbItems, out string errstring)

##### Python prototype

[errstring] GroupMoveRelative (GroupName, TargetDisplacement, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double[]) TargetDisplacement: TargetDisplacement

(Int32) nbItems: nbItems

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupMoveRelative command which is used to Do a relative move. Refer to the XPS Programmer's manual to get the command description.

### GroupPositionCurrentGet

#### Syntax

##### C# prototype

int GroupPositionCurrentGet(string GroupName, out double[] CurrentEncoderPosition, Int32 nbItems, out string errstring)

##### Python prototype

[CurrentEncoderPosition, errstring] GroupPositionCurrentGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) CurrentEncoderPosition: CurrentEncoderPosition

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupPositionCurrentGet command which is used to Return current position. Refer to the XPS Programmer's manual to get the command description.

### GroupPositionSetpointGet

#### Syntax

##### C# prototype

int GroupPositionSetpointGet(string GroupName, out double[] SetPointPosition, Int32 nbItems, out string errstring)

##### Python prototype

[SetPointPosition, errstring] GroupPositionSetpointGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) SetPointPosition: SetPointPosition

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupPositionSetpointGet command which is used to Return setpoint position. Refer to the XPS Programmer's manual to get the command description.

### GroupPositionTargetGet

#### Syntax

##### C# prototype

int GroupPositionTargetGet(string GroupName, out double[] TargetPosition, Int32 nbItems, out string errstring)

##### Python prototype

[TargetPosition, errstring] GroupPositionTargetGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) TargetPosition: TargetPosition

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupPositionTargetGet command which is used to Return target position. Refer to the XPS Programmer's manual to get the command description.

### GroupReferencingActionExecute

#### Syntax

##### C# prototype

int GroupReferencingActionExecute(string PositionerName, string ReferencingAction, string ReferencingSensor, double ReferencingParameter, out string errstring)

##### Python prototype

[errstring] GroupReferencingActionExecute (PositionerName, ReferencingAction, ReferencingSensor, ReferencingParameter)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) ReferencingAction: ReferencingAction

(string) ReferencingSensor: ReferencingSensor

(double) ReferencingParameter: ReferencingParameter

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupReferencingActionExecute command which is used to Execute action in referencing mode. Refer to the XPS Programmer's manual to get the command description.

### GroupReferencingStart

#### Syntax

##### C# prototype

int GroupReferencingStart(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupReferencingStart (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupReferencingStart command which is used to Enter referencing mode. Refer to the XPS Programmer's manual to get the command description.

### GroupReferencingStop

#### Syntax

##### C# prototype

int GroupReferencingStop(string GroupName, out string errstring)

##### Python prototype

[errstring] GroupReferencingStop (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupReferencingStop command which is used to Exit referencing mode. Refer to the XPS Programmer's manual to get the command description.

### GroupStatusGet

#### Syntax

##### C# prototype

int GroupStatusGet(string GroupName, out Int32 Status, out string errstring)

##### Python prototype

[Status, errstring] GroupStatusGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) Status: Status

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupStatusGet command which is used to Return group status. Refer to the XPS Programmer's manual to get the command description.

### GroupStatusStringGet

#### Syntax

##### C# prototype

int GroupStatusStringGet(Int32 GroupStatusCode, out string GroupStatusString, out string errstring)

##### Python prototype

[GroupStatusString, errstring] GroupStatusStringGet (GroupStatusCode)

#### Parameters

##### Input parameters

(Int32) GroupStatusCode: GroupStatusCode

##### Output parameters

(string) GroupStatusString: GroupStatusString

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupStatusStringGet command which is used to Return group status string corresponding to the group status code. Refer to the XPS Programmer's manual to get the command description.

### GroupVelocityCurrentGet

#### Syntax

##### C# prototype

int GroupVelocityCurrentGet(string GroupName, out double[] CurrentVelocity, Int32 nbItems, out string errstring)

##### Python prototype

[CurrentVelocity, errstring] GroupVelocityCurrentGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) CurrentVelocity: CurrentVelocity

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupVelocityCurrentGet command which is used to Return current velocity. Refer to the XPS Programmer's manual to get the command description.

### GroupVelocitySetpointGet

#### Syntax

##### C# prototype

int GroupVelocitySetpointGet(string GroupName, out double[] SetpointVelocity, Int32 nbItems, out string errstring)

##### Python prototype

[SetpointVelocity, errstring] GroupVelocitySetpointGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) SetpointVelocity: SetpointVelocity

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupVelocitySetpointGet command which is used to Return setpoint velocity. Refer to the XPS Programmer's manual to get the command description.

### KillAll

#### Syntax

##### C# prototype

int KillAll( out string errstring)

##### Python prototype

[errstring] KillAll ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous KillAll command which is used to Put all groups in NOT\_INITIALIZED state. Refer to the XPS Programmer's manual to get the command description.

### PositionerDriverStatusGet

#### Syntax

##### C# prototype

int PositionerDriverStatusGet(string PositionerName, out UInt32 DriverStatus, out string errstring)

##### Python prototype

[DriverStatus, errstring] PositionerDriverStatusGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(UInt32\_l) DriverStatus: DriverStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerDriverStatusGet command which is used to Read positioner driver status. Refer to the XPS Programmer's manual to get the command description.

### PositionerDriverStatusStringGet

#### Syntax

##### C# prototype

int PositionerDriverStatusStringGet(UInt32 PositionerDriverStatus, out string PositionerDriverStatusString, out string errstring)

##### Python prototype

[PositionerDriverStatusString, errstring] PositionerDriverStatusStringGet (PositionerDriverStatus)

#### Parameters

##### Input parameters

(UInt32) PositionerDriverStatus: PositionerDriverStatus

##### Output parameters

(string) PositionerDriverStatusString: PositionerDriverStatusString

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerDriverStatusStringGet command which is used to Return driver status string from the driver status code. Refer to the XPS Programmer's manual to get the command description.

### PositionerErrorGet

#### Syntax

##### C# prototype

int PositionerErrorGet(string PositionerName, out Int32 ErrorCode, out string errstring)

##### Python prototype

[ErrorCode, errstring] PositionerErrorGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(Int32\_i) ErrorCode: ErrorCode

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerErrorGet command which is used to Read and clear positioner error code. Refer to the XPS Programmer's manual to get the command description.

### PositionerErrorRead

#### Syntax

##### C# prototype

int PositionerErrorRead(string PositionerName, out Int32 ErrorCode, out string errstring)

##### Python prototype

[ErrorCode, errstring] PositionerErrorRead (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(Int32\_i) ErrorCode: ErrorCode

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerErrorRead command which is used to Read only positioner error code without clear it. Refer to the XPS Programmer's manual to get the command description.

### PositionerErrorStringGet

#### Syntax

##### C# prototype

int PositionerErrorStringGet(Int32 PositionerErrorCode, out string PositionerErrorString, out string errstring)

##### Python prototype

[PositionerErrorString, errstring] PositionerErrorStringGet (PositionerErrorCode)

#### Parameters

##### Input parameters

(Int32) PositionerErrorCode: PositionerErrorCode

##### Output parameters

(string) PositionerErrorString: PositionerErrorString

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerErrorStringGet command which is used to Return positioner error string from positioner error code. Refer to the XPS Programmer's manual to get the command description.

### PositionerHardwareStatusGet

#### Syntax

##### C# prototype

int PositionerHardwareStatusGet(string PositionerName, out Int32 HardwareStatus, out string errstring)

##### Python prototype

[HardwareStatus, errstring] PositionerHardwareStatusGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(Int32\_i) HardwareStatus: HardwareStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerHardwareStatusGet command which is used to Read positioner hardware status. Refer to the XPS Programmer's manual to get the command description.

### PositionerHardwareStatusStringGet

#### Syntax

##### C# prototype

int PositionerHardwareStatusStringGet(Int32 PositionerHardwareStatus, out string PositionerHardwareStatusString, out string errstring)

##### Python prototype

[PositionerHardwareStatusString, errstring] PositionerHardwareStatusStringGet (PositionerHardwareStatus)

#### Parameters

##### Input parameters

(Int32) PositionerHardwareStatus: PositionerHardwareStatus

##### Output parameters

(string) PositionerHardwareStatusString: PositionerHardwareStatusString

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerHardwareStatusStringGet command which is used to Return hardware status string from hardware status code. Refer to the XPS Programmer's manual to get the command description.

### PositionersEncoderIndexDifferenceGet

#### Syntax

##### C# prototype

int PositionersEncoderIndexDifferenceGet(string PositionerName, out double distance, out string errstring)

##### Python prototype

[distance, errstring] PositionersEncoderIndexDifferenceGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) distance: distance

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionersEncoderIndexDifferenceGet command which is used to Return the difference between index of primary axis and secondary axis . Refer to the XPS Programmer's manual to get the command description.

### PositionerGantryEndReferencingPositionGet

#### Syntax

##### C# prototype

int PositionerGantryEndReferencingPositionGet(string PositionerName, out double Position, out string errstring)

##### Python prototype

[Position, errstring] PositionerGantryEndReferencingPositionGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) Position: Position

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerGantryEndReferencingPositionGet command which is used to Return the secondary axis position at the end of home. Refer to the XPS Programmer's manual to get the command description.

### PositionerStageParameterGet

#### Syntax

##### C# prototype

int PositionerStageParameterGet(string PositionerName, string ParameterName, out string ParameterValue, out string errstring)

##### Python prototype

[ParameterValue, errstring] PositionerStageParameterGet (PositionerName, ParameterName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) ParameterName: ParameterName

##### Output parameters

(string) ParameterValue: ParameterValue

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerStageParameterGet command which is used to Return the stage parameter. Refer to the XPS Programmer's manual to get the command description.

### PositionerStageParameterSet

#### Syntax

##### C# prototype

int PositionerStageParameterSet(string PositionerName, string ParameterName, string ParameterValue, out string errstring)

##### Python prototype

[errstring] PositionerStageParameterSet (PositionerName, ParameterName, ParameterValue)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) ParameterName: ParameterName

(string) ParameterValue: ParameterValue

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerStageParameterSet command which is used to Save the stage parameter. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorTypeGet

#### Syntax

##### C# prototype

int PositionerCorrectorTypeGet(string PositionerName, out string CorrectorType, out string errstring)

##### Python prototype

[CorrectorType, errstring] PositionerCorrectorTypeGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) CorrectorType: CorrectorType

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorTypeGet command which is used to Read corrector type. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorFilterListGet

#### Syntax

##### C# prototype

int PositionerCorrectorFilterListGet(string PositionerName, out string CorrectorFilterList, out string errstring)

##### Python prototype

[CorrectorFilterList, errstring] PositionerCorrectorFilterListGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) CorrectorFilterList: CorrectorFilterList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorFilterListGet command which is used to Get the list of corrector's filters. Refer to the XPS Programmer's manual to get the command description.

### PositionerWarningFollowingErrorSet

#### Syntax

##### C# prototype

int PositionerWarningFollowingErrorSet(string PositionerName, double WarningFollowingError, out string errstring)

##### Python prototype

[errstring] PositionerWarningFollowingErrorSet (PositionerName, WarningFollowingError)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) WarningFollowingError: WarningFollowingError

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerWarningFollowingErrorSet command which is used to Set positioner warning following error limit. Refer to the XPS Programmer's manual to get the command description.

### PositionerWarningFollowingErrorGet

#### Syntax

##### C# prototype

int PositionerWarningFollowingErrorGet(string PositionerName, out double WarningFollowingError, out string errstring)

##### Python prototype

[WarningFollowingError, errstring] PositionerWarningFollowingErrorGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) WarningFollowingError: WarningFollowingError

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerWarningFollowingErrorGet command which is used to Get positioner warning following error limit. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPositionFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationPositionFilterSet(string PositionerName, Int32 FilterNumber, double Frequency, double DampingFactor, out string errstring)

##### Python prototype

[errstring] PositionerCompensationPositionFilterSet (PositionerName, FilterNumber, Frequency, DampingFactor)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) FilterNumber: FilterNumber

(double) Frequency: Frequency

(double) DampingFactor: DampingFactor

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPositionFilterSet command which is used to Set and update position filter parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPositionFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationPositionFilterGet(string PositionerName, Int32 FilterNumber, out double Frequency, out double DampingFactor, out string errstring)

##### Python prototype

[Frequency, DampingFactor, errstring] PositionerCompensationPositionFilterGet (PositionerName, FilterNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) FilterNumber: FilterNumber

##### Output parameters

(double) Frequency: Frequency

(double) DampingFactor: DampingFactor

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPositionFilterGet command which is used to Get position filter parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPlantFeedForwardDelaySet

#### Syntax

##### C# prototype

int PositionerCorrectorPlantFeedForwardDelaySet(string PositionerName, Int32 CorrectorISRPeriodNumber, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorPlantFeedForwardDelaySet (PositionerName, CorrectorISRPeriodNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) CorrectorISRPeriodNumber: CorrectorISRPeriodNumber

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPlantFeedForwardDelaySet command which is used to Set and update the fifo depth of Plant FeedForward Delay. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPlantFeedForwardDelayGet

#### Syntax

##### C# prototype

int PositionerCorrectorPlantFeedForwardDelayGet(string PositionerName, out Int32 CorrectorISRPeriodNumber, out string errstring)

##### Python prototype

[CorrectorISRPeriodNumber, errstring] PositionerCorrectorPlantFeedForwardDelayGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(Int32\_i) CorrectorISRPeriodNumber: CorrectorISRPeriodNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPlantFeedForwardDelayGet command which is used to Get the fifo depth of Plant FeedForward Delay. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationDisturbanceDisable

#### Syntax

##### C# prototype

int PositionerCompensationDisturbanceDisable(string PositionerName, string DisabledDirection, out string errstring)

##### Python prototype

[errstring] PositionerCompensationDisturbanceDisable (PositionerName, DisabledDirection)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) DisabledDirection: DisabledDirection

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationDisturbanceDisable command which is used to Disable disturbance compensation for selected direction . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationDisturbanceEnable

#### Syntax

##### C# prototype

int PositionerCompensationDisturbanceEnable(string PositionerName, string EnabledDirection, out string errstring)

##### Python prototype

[errstring] PositionerCompensationDisturbanceEnable (PositionerName, EnabledDirection)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) EnabledDirection: EnabledDirection

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationDisturbanceEnable command which is used to Enable disturbance compensation for selected direction . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationDisturbanceFileLoad

#### Syntax

##### C# prototype

int PositionerCompensationDisturbanceFileLoad(string PositionerName, string Direction, string FileName, out string errstring)

##### Python prototype

[errstring] PositionerCompensationDisturbanceFileLoad (PositionerName, Direction, FileName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) Direction: Direction

(string) FileName: FileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationDisturbanceFileLoad command which is used to Load file to compensate disturbance in requested direction . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationDisturbanceStatusGet

#### Syntax

##### C# prototype

int PositionerCompensationDisturbanceStatusGet(string PositionerName, out Int32 PositiveCompensationEnabledStatus, out Int32 NegativeCompensationEnabledStatus, out string errstring)

##### Python prototype

[PositiveCompensationEnabledStatus, NegativeCompensationEnabledStatus, errstring] PositionerCompensationDisturbanceStatusGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(Int32\_i) PositiveCompensationEnabledStatus: PositiveCompensationEnabledStatus

(Int32\_i) NegativeCompensationEnabledStatus: NegativeCompensationEnabledStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationDisturbanceStatusGet command which is used to Get status of disturbance compensation in both directions . Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorAutoTuning

#### Syntax

##### C# prototype

int PositionerCorrectorAutoTuning(string PositionerName, Int32 TuningMode, out double KP, out double KI, out double KD, out string errstring)

##### Python prototype

[KP, KI, KD, errstring] PositionerCorrectorAutoTuning (PositionerName, TuningMode)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) TuningMode: TuningMode

##### Output parameters

(double) KP: KP

(double) KI: KI

(double) KD: KD

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorAutoTuning command which is used to Astrom and Hagglund based auto-tuning. Refer to the XPS Programmer's manual to get the command description.

### PositionerAccelerationAutoScaling

#### Syntax

##### C# prototype

int PositionerAccelerationAutoScaling(string PositionerName, out double Scaling, out string errstring)

##### Python prototype

[Scaling, errstring] PositionerAccelerationAutoScaling (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) Scaling: Scaling

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerAccelerationAutoScaling command which is used to Astrom and Hagglund based auto-scaling. Refer to the XPS Programmer's manual to get the command description.

### PositionerExcitationSignalGet

#### Syntax

##### C# prototype

int PositionerExcitationSignalGet(string PositionerName, out Int32 Mode, out double Frequency, out double Amplitude, out double Time, out string errstring)

##### Python prototype

[Mode, Frequency, Amplitude, Time, errstring] PositionerExcitationSignalGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(Int32\_i) Mode: Mode

(double) Frequency: Frequency

(double) Amplitude: Amplitude

(double) Time: Time

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerExcitationSignalGet command which is used to Get excitation signal parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerExcitationSignalSet

#### Syntax

##### C# prototype

int PositionerExcitationSignalSet(string PositionerName, Int32 Mode, double Frequency, double Amplitude, double Time, out string errstring)

##### Python prototype

[errstring] PositionerExcitationSignalSet (PositionerName, Mode, Frequency, Amplitude, Time)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) Mode: Mode

(double) Frequency: Frequency

(double) Amplitude: Amplitude

(double) Time: Time

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerExcitationSignalSet command which is used to Set excitation signal mode. Refer to the XPS Programmer's manual to get the command description.

### PositionerExcitationSignalCorrectorOutSet

#### Syntax

##### C# prototype

int PositionerExcitationSignalCorrectorOutSet(string PositionerName, Int32 Mode, double Frequency, double Amplitude, double Time, out string errstring)

##### Python prototype

[errstring] PositionerExcitationSignalCorrectorOutSet (PositionerName, Mode, Frequency, Amplitude, Time)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) Mode: Mode

(double) Frequency: Frequency

(double) Amplitude: Amplitude

(double) Time: Time

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerExcitationSignalCorrectorOutSet command which is used to Set excitation signal mode at corrector out. Refer to the XPS Programmer's manual to get the command description.

### PositionerCurrentVelocityAccelerationFiltersSet

#### Syntax

##### C# prototype

int PositionerCurrentVelocityAccelerationFiltersSet(string PositionerName, double CurrentVelocityCutOffFrequency, double CurrentAccelerationCutOffFrequency, out string errstring)

##### Python prototype

[errstring] PositionerCurrentVelocityAccelerationFiltersSet (PositionerName, CurrentVelocityCutOffFrequency, CurrentAccelerationCutOffFrequency)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) CurrentVelocityCutOffFrequency: CurrentVelocityCutOffFrequency

(double) CurrentAccelerationCutOffFrequency: CurrentAccelerationCutOffFrequency

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCurrentVelocityAccelerationFiltersSet command which is used to Set current velocity and acceleration cut off frequencies. Refer to the XPS Programmer's manual to get the command description.

### PositionerCurrentVelocityAccelerationFiltersGet

#### Syntax

##### C# prototype

int PositionerCurrentVelocityAccelerationFiltersGet(string PositionerName, out double CurrentVelocityCutOffFrequency, out double CurrentAccelerationCutOffFrequency, out string errstring)

##### Python prototype

[CurrentVelocityCutOffFrequency, CurrentAccelerationCutOffFrequency, errstring] PositionerCurrentVelocityAccelerationFiltersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) CurrentVelocityCutOffFrequency: CurrentVelocityCutOffFrequency

(double) CurrentAccelerationCutOffFrequency: CurrentAccelerationCutOffFrequency

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCurrentVelocityAccelerationFiltersGet command which is used to Get current velocity and acceleration cut off frequencies. Refer to the XPS Programmer's manual to get the command description.

### PositionerEncoderAmplitudeValuesGet

#### Syntax

##### C# prototype

int PositionerEncoderAmplitudeValuesGet(string PositionerName, out double CalibrationSinusAmplitude, out double CurrentSinusAmplitude, out double CalibrationCosinusAmplitude, out double CurrentCosinusAmplitude, out string errstring)

##### Python prototype

[CalibrationSinusAmplitude, CurrentSinusAmplitude, CalibrationCosinusAmplitude, CurrentCosinusAmplitude, errstring] PositionerEncoderAmplitudeValuesGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) CalibrationSinusAmplitude: CalibrationSinusAmplitude

(double) CurrentSinusAmplitude: CurrentSinusAmplitude

(double) CalibrationCosinusAmplitude: CalibrationCosinusAmplitude

(double) CurrentCosinusAmplitude: CurrentCosinusAmplitude

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerEncoderAmplitudeValuesGet command which is used to Read analog interpolated encoder amplitude values. Refer to the XPS Programmer's manual to get the command description.

### PositionerEncoderCalibrationParametersGet

#### Syntax

##### C# prototype

int PositionerEncoderCalibrationParametersGet(string PositionerName, out double SinusOffset, out double CosinusOffset, out double DifferentialGain, out double PhaseCompensation, out string errstring)

##### Python prototype

[SinusOffset, CosinusOffset, DifferentialGain, PhaseCompensation, errstring] PositionerEncoderCalibrationParametersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) SinusOffset: SinusOffset

(double) CosinusOffset: CosinusOffset

(double) DifferentialGain: DifferentialGain

(double) PhaseCompensation: PhaseCompensation

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerEncoderCalibrationParametersGet command which is used to Read analog interpolated encoder calibration parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerRawEncoderPositionGet

#### Syntax

##### C# prototype

int PositionerRawEncoderPositionGet(string PositionerName, double UserEncoderPosition, out double RawEncoderPosition, out string errstring)

##### Python prototype

[RawEncoderPosition, errstring] PositionerRawEncoderPositionGet (PositionerName, UserEncoderPosition)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) UserEncoderPosition: UserEncoderPosition

##### Output parameters

(double) RawEncoderPosition: RawEncoderPosition

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerRawEncoderPositionGet command which is used to Get the raw encoder position. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIDFFAccelerationSet

#### Syntax

##### C# prototype

int PositionerCorrectorPIDFFAccelerationSet(string PositionerName, bool ClosedLoopStatus, double KP, double KI, double KD, double KS, double IntegrationTime, double DerivativeFilterCutOffFrequency, double GKP, double GKI, double GKD, double KForm, double KFeedForwardAcceleration, double KFeedForwardJerk, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorPIDFFAccelerationSet (PositionerName, ClosedLoopStatus, KP, KI, KD, KS, IntegrationTime, DerivativeFilterCutOffFrequency, GKP, GKI, GKD, KForm, KFeedForwardAcceleration, KFeedForwardJerk)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(bool) ClosedLoopStatus: ClosedLoopStatus

(double) KP: KP

(double) KI: KI

(double) KD: KD

(double) KS: KS

(double) IntegrationTime: IntegrationTime

(double) DerivativeFilterCutOffFrequency: DerivativeFilterCutOffFrequency

(double) GKP: GKP

(double) GKI: GKI

(double) GKD: GKD

(double) KForm: KForm

(double) KFeedForwardAcceleration: KFeedForwardAcceleration

(double) KFeedForwardJerk: KFeedForwardJerk

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIDFFAccelerationSet command which is used to Update corrector parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIDFFAccelerationGet

#### Syntax

##### C# prototype

int PositionerCorrectorPIDFFAccelerationGet(string PositionerName, out bool ClosedLoopStatus, out double KP, out double KI, out double KD, out double KS, out double IntegrationTime, out double DerivativeFilterCutOffFrequency, out double GKP, out double GKI, out double GKD, out double KForm, out double KFeedForwardAcceleration, out double KFeedForwardJerk, out string errstring)

##### Python prototype

[ClosedLoopStatus, KP, KI, KD, KS, IntegrationTime, DerivativeFilterCutOffFrequency, GKP, GKI, GKD, KForm, KFeedForwardAcceleration, KFeedForwardJerk, errstring] PositionerCorrectorPIDFFAccelerationGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(bool) ClosedLoopStatus: ClosedLoopStatus

(double) KP: KP

(double) KI: KI

(double) KD: KD

(double) KS: KS

(double) IntegrationTime: IntegrationTime

(double) DerivativeFilterCutOffFrequency: DerivativeFilterCutOffFrequency

(double) GKP: GKP

(double) GKI: GKI

(double) GKD: GKD

(double) KForm: KForm

(double) KFeedForwardAcceleration: KFeedForwardAcceleration

(double) KFeedForwardJerk: KFeedForwardJerk

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIDFFAccelerationGet command which is used to Read corrector parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIDAccelerationFilterSet

#### Syntax

##### C# prototype

int PositionerCorrectorPIDAccelerationFilterSet(string PositionerName, bool FilterControlStatus, double KD, double DerivativeFilterCutOffFrequency, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorPIDAccelerationFilterSet (PositionerName, FilterControlStatus, KD, DerivativeFilterCutOffFrequency)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(bool) FilterControlStatus: FilterControlStatus

(double) KD: KD

(double) DerivativeFilterCutOffFrequency: DerivativeFilterCutOffFrequency

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIDAccelerationFilterSet command which is used to Update PID acceleration corrector filter parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIDAccelerationFilterGet

#### Syntax

##### C# prototype

int PositionerCorrectorPIDAccelerationFilterGet(string PositionerName, out bool FilterControlStatus, out double KD, out double DerivativeFilterCutOffFrequency, out string errstring)

##### Python prototype

[FilterControlStatus, KD, DerivativeFilterCutOffFrequency, errstring] PositionerCorrectorPIDAccelerationFilterGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(bool) FilterControlStatus: FilterControlStatus

(double) KD: KD

(double) DerivativeFilterCutOffFrequency: DerivativeFilterCutOffFrequency

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIDAccelerationFilterGet command which is used to Read PID acceleration corrector filter parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorDamperFilterSet

#### Syntax

##### C# prototype

int PositionerCorrectorDamperFilterSet(string PositionerName, double CutOffFrequency, double DampingFactor, double Gain, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorDamperFilterSet (PositionerName, CutOffFrequency, DampingFactor, Gain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) CutOffFrequency: CutOffFrequency

(double) DampingFactor: DampingFactor

(double) Gain: Gain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorDamperFilterSet command which is used to Update corrector damper filter parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorDamperFilterGet

#### Syntax

##### C# prototype

int PositionerCorrectorDamperFilterGet(string PositionerName, out double CutOffFrequency, out double DampingFactor, out double Gain, out string errstring)

##### Python prototype

[CutOffFrequency, DampingFactor, Gain, errstring] PositionerCorrectorDamperFilterGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) CutOffFrequency: CutOffFrequency

(double) DampingFactor: DampingFactor

(double) Gain: Gain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorDamperFilterGet command which is used to Read corrector damper filter parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPostFFSet

#### Syntax

##### C# prototype

int PositionerCorrectorPostFFSet(string PositionerName, double PostKFeedForwardAcceleration, double PostKFeedForwardJerk, double PostKFeedForwardSlope, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorPostFFSet (PositionerName, PostKFeedForwardAcceleration, PostKFeedForwardJerk, PostKFeedForwardSlope)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) PostKFeedForwardAcceleration: PostKFeedForwardAcceleration

(double) PostKFeedForwardJerk: PostKFeedForwardJerk

(double) PostKFeedForwardSlope: PostKFeedForwardSlope

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPostFFSet command which is used to Update post feedforward parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPostFFGet

#### Syntax

##### C# prototype

int PositionerCorrectorPostFFGet(string PositionerName, out double PostKFeedForwardAcceleration, out double PostKFeedForwardJerk, out double PostKFeedForwardSlope, out string errstring)

##### Python prototype

[PostKFeedForwardAcceleration, PostKFeedForwardJerk, PostKFeedForwardSlope, errstring] PositionerCorrectorPostFFGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) PostKFeedForwardAcceleration: PostKFeedForwardAcceleration

(double) PostKFeedForwardJerk: PostKFeedForwardJerk

(double) PostKFeedForwardSlope: PostKFeedForwardSlope

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPostFFGet command which is used to Read post feedforward parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorExcitationSignalGainSet

#### Syntax

##### C# prototype

int PositionerCorrectorExcitationSignalGainSet(string PositionerName, double ExcitationSignalGain, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorExcitationSignalGainSet (PositionerName, ExcitationSignalGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) ExcitationSignalGain: ExcitationSignalGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorExcitationSignalGainSet command which is used to Update the excitation signal gain [-1:1]. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorExcitationSignalGainGet

#### Syntax

##### C# prototype

int PositionerCorrectorExcitationSignalGainGet(string PositionerName, out double ExcitationSignalGain, out string errstring)

##### Python prototype

[ExcitationSignalGain, errstring] PositionerCorrectorExcitationSignalGainGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) ExcitationSignalGain: ExcitationSignalGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorExcitationSignalGainGet command which is used to Read excitation signal gain. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIDBaseSet

#### Syntax

##### C# prototype

int PositionerCorrectorPIDBaseSet(string PositionerName, double MovingMass, double StaticMass, double Viscosity, double Stiffness, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorPIDBaseSet (PositionerName, MovingMass, StaticMass, Viscosity, Stiffness)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) MovingMass: MovingMass

(double) StaticMass: StaticMass

(double) Viscosity: Viscosity

(double) Stiffness: Stiffness

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIDBaseSet command which is used to Update PIDBase parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIDBaseGet

#### Syntax

##### C# prototype

int PositionerCorrectorPIDBaseGet(string PositionerName, out double MovingMass, out double StaticMass, out double Viscosity, out double Stiffness, out string errstring)

##### Python prototype

[MovingMass, StaticMass, Viscosity, Stiffness, errstring] PositionerCorrectorPIDBaseGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) MovingMass: MovingMass

(double) StaticMass: StaticMass

(double) Viscosity: Viscosity

(double) Stiffness: Stiffness

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIDBaseGet command which is used to Read PIDBase parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareScanAccelerationLimitGet

#### Syntax

##### C# prototype

int PositionerPositionCompareScanAccelerationLimitGet(string PositionerName, out double ScanAccelerationLimit, out string errstring)

##### Python prototype

[ScanAccelerationLimit, errstring] PositionerPositionCompareScanAccelerationLimitGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) ScanAccelerationLimit: ScanAccelerationLimit

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareScanAccelerationLimitGet command which is used to Get position compare scan acceleration limit. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareScanAccelerationLimitSet

#### Syntax

##### C# prototype

int PositionerPositionCompareScanAccelerationLimitSet(string PositionerName, double ScanAccelerationLimit, out string errstring)

##### Python prototype

[errstring] PositionerPositionCompareScanAccelerationLimitSet (PositionerName, ScanAccelerationLimit)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) ScanAccelerationLimit: ScanAccelerationLimit

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareScanAccelerationLimitSet command which is used to Set position compare scan acceleration limit. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIDDualFFVoltageSet

#### Syntax

##### C# prototype

int PositionerCorrectorPIDDualFFVoltageSet(string PositionerName, bool ClosedLoopStatus, double KP, double KI, double KD, double KS, double IntegrationTime, double DerivativeFilterCutOffFrequency, double GKP, double GKI, double GKD, double KForm, double KFeedForwardVelocity, double KFeedForwardAcceleration, double Friction, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorPIDDualFFVoltageSet (PositionerName, ClosedLoopStatus, KP, KI, KD, KS, IntegrationTime, DerivativeFilterCutOffFrequency, GKP, GKI, GKD, KForm, KFeedForwardVelocity, KFeedForwardAcceleration, Friction)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(bool) ClosedLoopStatus: ClosedLoopStatus

(double) KP: KP

(double) KI: KI

(double) KD: KD

(double) KS: KS

(double) IntegrationTime: IntegrationTime

(double) DerivativeFilterCutOffFrequency: DerivativeFilterCutOffFrequency

(double) GKP: GKP

(double) GKI: GKI

(double) GKD: GKD

(double) KForm: KForm

(double) KFeedForwardVelocity: KFeedForwardVelocity

(double) KFeedForwardAcceleration: KFeedForwardAcceleration

(double) Friction: Friction

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIDDualFFVoltageSet command which is used to Update corrector parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIDDualFFVoltageGet

#### Syntax

##### C# prototype

int PositionerCorrectorPIDDualFFVoltageGet(string PositionerName, out bool ClosedLoopStatus, out double KP, out double KI, out double KD, out double KS, out double IntegrationTime, out double DerivativeFilterCutOffFrequency, out double GKP, out double GKI, out double GKD, out double KForm, out double KFeedForwardVelocity, out double KFeedForwardAcceleration, out double Friction, out string errstring)

##### Python prototype

[ClosedLoopStatus, KP, KI, KD, KS, IntegrationTime, DerivativeFilterCutOffFrequency, GKP, GKI, GKD, KForm, KFeedForwardVelocity, KFeedForwardAcceleration, Friction, errstring] PositionerCorrectorPIDDualFFVoltageGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(bool) ClosedLoopStatus: ClosedLoopStatus

(double) KP: KP

(double) KI: KI

(double) KD: KD

(double) KS: KS

(double) IntegrationTime: IntegrationTime

(double) DerivativeFilterCutOffFrequency: DerivativeFilterCutOffFrequency

(double) GKP: GKP

(double) GKI: GKI

(double) GKD: GKD

(double) KForm: KForm

(double) KFeedForwardVelocity: KFeedForwardVelocity

(double) KFeedForwardAcceleration: KFeedForwardAcceleration

(double) Friction: Friction

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIDDualFFVoltageGet command which is used to Read corrector parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIDFFVelocitySet

#### Syntax

##### C# prototype

int PositionerCorrectorPIDFFVelocitySet(string PositionerName, bool ClosedLoopStatus, double KP, double KI, double KD, double KS, double IntegrationTime, double DerivativeFilterCutOffFrequency, double GKP, double GKI, double GKD, double KForm, double KFeedForwardVelocity, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorPIDFFVelocitySet (PositionerName, ClosedLoopStatus, KP, KI, KD, KS, IntegrationTime, DerivativeFilterCutOffFrequency, GKP, GKI, GKD, KForm, KFeedForwardVelocity)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(bool) ClosedLoopStatus: ClosedLoopStatus

(double) KP: KP

(double) KI: KI

(double) KD: KD

(double) KS: KS

(double) IntegrationTime: IntegrationTime

(double) DerivativeFilterCutOffFrequency: DerivativeFilterCutOffFrequency

(double) GKP: GKP

(double) GKI: GKI

(double) GKD: GKD

(double) KForm: KForm

(double) KFeedForwardVelocity: KFeedForwardVelocity

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIDFFVelocitySet command which is used to Update corrector parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIDFFVelocityGet

#### Syntax

##### C# prototype

int PositionerCorrectorPIDFFVelocityGet(string PositionerName, out bool ClosedLoopStatus, out double KP, out double KI, out double KD, out double KS, out double IntegrationTime, out double DerivativeFilterCutOffFrequency, out double GKP, out double GKI, out double GKD, out double KForm, out double KFeedForwardVelocity, out string errstring)

##### Python prototype

[ClosedLoopStatus, KP, KI, KD, KS, IntegrationTime, DerivativeFilterCutOffFrequency, GKP, GKI, GKD, KForm, KFeedForwardVelocity, errstring] PositionerCorrectorPIDFFVelocityGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(bool) ClosedLoopStatus: ClosedLoopStatus

(double) KP: KP

(double) KI: KI

(double) KD: KD

(double) KS: KS

(double) IntegrationTime: IntegrationTime

(double) DerivativeFilterCutOffFrequency: DerivativeFilterCutOffFrequency

(double) GKP: GKP

(double) GKI: GKI

(double) GKD: GKD

(double) KForm: KForm

(double) KFeedForwardVelocity: KFeedForwardVelocity

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIDFFVelocityGet command which is used to Read corrector parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIPositionSet

#### Syntax

##### C# prototype

int PositionerCorrectorPIPositionSet(string PositionerName, bool ClosedLoopStatus, double KP, double KI, double IntegrationTime, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorPIPositionSet (PositionerName, ClosedLoopStatus, KP, KI, IntegrationTime)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(bool) ClosedLoopStatus: ClosedLoopStatus

(double) KP: KP

(double) KI: KI

(double) IntegrationTime: IntegrationTime

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIPositionSet command which is used to Update corrector parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorPIPositionGet

#### Syntax

##### C# prototype

int PositionerCorrectorPIPositionGet(string PositionerName, out bool ClosedLoopStatus, out double KP, out double KI, out double IntegrationTime, out string errstring)

##### Python prototype

[ClosedLoopStatus, KP, KI, IntegrationTime, errstring] PositionerCorrectorPIPositionGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(bool) ClosedLoopStatus: ClosedLoopStatus

(double) KP: KP

(double) KI: KI

(double) IntegrationTime: IntegrationTime

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorPIPositionGet command which is used to Read corrector parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorDualSet

#### Syntax

##### C# prototype

int PositionerCorrectorDualSet(string PositionerName, bool ClosedLoopStatus, double KP, double KI, double KD, double IntegrationTime, double DerivativeFilterCutOffFrequency, double KFeedForwardAcceleration, double KFeedForwardJerk, double AntiWindUpTime, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorDualSet (PositionerName, ClosedLoopStatus, KP, KI, KD, IntegrationTime, DerivativeFilterCutOffFrequency, KFeedForwardAcceleration, KFeedForwardJerk, AntiWindUpTime)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(bool) ClosedLoopStatus: ClosedLoopStatus

(double) KP: KP

(double) KI: KI

(double) KD: KD

(double) IntegrationTime: IntegrationTime

(double) DerivativeFilterCutOffFrequency: DerivativeFilterCutOffFrequency

(double) KFeedForwardAcceleration: KFeedForwardAcceleration

(double) KFeedForwardJerk: KFeedForwardJerk

(double) AntiWindUpTime: AntiWindUpTime

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorDualSet command which is used to Update dual corrector parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorDualGet

#### Syntax

##### C# prototype

int PositionerCorrectorDualGet(string PositionerName, out bool ClosedLoopStatus, out double KP, out double KI, out double KD, out double IntegrationTime, out double DerivativeFilterCutOffFrequency, out double KFeedForwardAcceleration, out double KFeedForwardJerk, out double AntiWindUpTime, out string errstring)

##### Python prototype

[ClosedLoopStatus, KP, KI, KD, IntegrationTime, DerivativeFilterCutOffFrequency, KFeedForwardAcceleration, KFeedForwardJerk, AntiWindUpTime, errstring] PositionerCorrectorDualGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(bool) ClosedLoopStatus: ClosedLoopStatus

(double) KP: KP

(double) KI: KI

(double) KD: KD

(double) IntegrationTime: IntegrationTime

(double) DerivativeFilterCutOffFrequency: DerivativeFilterCutOffFrequency

(double) KFeedForwardAcceleration: KFeedForwardAcceleration

(double) KFeedForwardJerk: KFeedForwardJerk

(double) AntiWindUpTime: AntiWindUpTime

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorDualGet command which is used to Read dual corrector parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationDualLoopNotchFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationDualLoopNotchFilterSet(string PositionerName, Int32 NotchNumber, double NotchFrequency, double NotchBandwidth, double NotchGain, out string errstring)

##### Python prototype

[errstring] PositionerCompensationDualLoopNotchFilterSet (PositionerName, NotchNumber, NotchFrequency, NotchBandwidth, NotchGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchNumber: NotchNumber

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationDualLoopNotchFilterSet command which is used to Update Notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationDualLoopNotchFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationDualLoopNotchFilterGet(string PositionerName, Int32 NotchNumber, out double NotchFrequency, out double NotchBandwidth, out double NotchGain, out string errstring)

##### Python prototype

[NotchFrequency, NotchBandwidth, NotchGain, errstring] PositionerCompensationDualLoopNotchFilterGet (PositionerName, NotchNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchNumber: NotchNumber

##### Output parameters

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationDualLoopNotchFilterGet command which is used to Read Notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationDualLoopPhaseCorrectionFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationDualLoopPhaseCorrectionFilterSet(string PositionerName, Int32 PhaseCorrectionFilterNumber, double PhaseCorrectionFn, double PhaseCorrectionFd, double PhaseCorrectionGain, out string errstring)

##### Python prototype

[errstring] PositionerCompensationDualLoopPhaseCorrectionFilterSet (PositionerName, PhaseCorrectionFilterNumber, PhaseCorrectionFn, PhaseCorrectionFd, PhaseCorrectionGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) PhaseCorrectionFilterNumber: PhaseCorrectionFilterNumber

(double) PhaseCorrectionFn: PhaseCorrectionFn

(double) PhaseCorrectionFd: PhaseCorrectionFd

(double) PhaseCorrectionGain: PhaseCorrectionGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationDualLoopPhaseCorrectionFilterSet command which is used to Update one phase correction filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationDualLoopPhaseCorrectionFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationDualLoopPhaseCorrectionFilterGet(string PositionerName, Int32 PhaseCorrectionFilterNumber, out double PhaseCorrectionFn, out double PhaseCorrectionFd, out double PhaseCorrectionGain, out string errstring)

##### Python prototype

[PhaseCorrectionFn, PhaseCorrectionFd, PhaseCorrectionGain, errstring] PositionerCompensationDualLoopPhaseCorrectionFilterGet (PositionerName, PhaseCorrectionFilterNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) PhaseCorrectionFilterNumber: PhaseCorrectionFilterNumber

##### Output parameters

(double) PhaseCorrectionFn: PhaseCorrectionFn

(double) PhaseCorrectionFd: PhaseCorrectionFd

(double) PhaseCorrectionGain: PhaseCorrectionGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationDualLoopPhaseCorrectionFilterGet command which is used to Read one phase correction filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerDriverFiltersGet

#### Syntax

##### C# prototype

int PositionerDriverFiltersGet(string PositionerName, out double KI, out double NotchFrequency, out double NotchBandwidth, out double NotchGain, out double LowpassFrequency, out string errstring)

##### Python prototype

[KI, NotchFrequency, NotchBandwidth, NotchGain, LowpassFrequency, errstring] PositionerDriverFiltersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) KI: KI

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

(double) LowpassFrequency: LowpassFrequency

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerDriverFiltersGet command which is used to Get driver filters parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerDriverFiltersSet

#### Syntax

##### C# prototype

int PositionerDriverFiltersSet(string PositionerName, double KI, double NotchFrequency, double NotchBandwidth, double NotchGain, double LowpassFrequency, out string errstring)

##### Python prototype

[errstring] PositionerDriverFiltersSet (PositionerName, KI, NotchFrequency, NotchBandwidth, NotchGain, LowpassFrequency)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) KI: KI

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

(double) LowpassFrequency: LowpassFrequency

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerDriverFiltersSet command which is used to Set driver filters parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerDriverPositionOffsetsGet

#### Syntax

##### C# prototype

int PositionerDriverPositionOffsetsGet(string PositionerName, out double StagePositionOffset, out double GagePositionOffset, out string errstring)

##### Python prototype

[StagePositionOffset, GagePositionOffset, errstring] PositionerDriverPositionOffsetsGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) StagePositionOffset: StagePositionOffset

(double) GagePositionOffset: GagePositionOffset

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerDriverPositionOffsetsGet command which is used to Get driver stage and gage position offset. Refer to the XPS Programmer's manual to get the command description.

### PositionerPreCorrectorExcitationSignalGet

#### Syntax

##### C# prototype

int PositionerPreCorrectorExcitationSignalGet(string PositionerName, out double Frequency, out double Amplitude, out double Time, out string errstring)

##### Python prototype

[Frequency, Amplitude, Time, errstring] PositionerPreCorrectorExcitationSignalGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) Frequency: Frequency

(double) Amplitude: Amplitude

(double) Time: Time

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPreCorrectorExcitationSignalGet command which is used to Get pre-corrector excitation signal mode. Refer to the XPS Programmer's manual to get the command description.

### PositionerPreCorrectorExcitationSignalSet

#### Syntax

##### C# prototype

int PositionerPreCorrectorExcitationSignalSet(string PositionerName, double Frequency, double Amplitude, double Time, out string errstring)

##### Python prototype

[errstring] PositionerPreCorrectorExcitationSignalSet (PositionerName, Frequency, Amplitude, Time)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) Frequency: Frequency

(double) Amplitude: Amplitude

(double) Time: Time

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPreCorrectorExcitationSignalSet command which is used to Set pre-corrector excitation signal mode. Refer to the XPS Programmer's manual to get the command description.

### PositionerBacklashSet

#### Syntax

##### C# prototype

int PositionerBacklashSet(string PositionerName, double BacklashValue, out string errstring)

##### Python prototype

[errstring] PositionerBacklashSet (PositionerName, BacklashValue)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) BacklashValue: BacklashValue

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerBacklashSet command which is used to Set backlash value. Refer to the XPS Programmer's manual to get the command description.

### PositionerBacklashGet

#### Syntax

##### C# prototype

int PositionerBacklashGet(string PositionerName, out double BacklashValue, out string BacklaskStatus, out string errstring)

##### Python prototype

[BacklashValue, BacklaskStatus, errstring] PositionerBacklashGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) BacklashValue: BacklashValue

(string) BacklaskStatus: BacklaskStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerBacklashGet command which is used to Read backlash value and status. Refer to the XPS Programmer's manual to get the command description.

### PositionerBacklashEnable

#### Syntax

##### C# prototype

int PositionerBacklashEnable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerBacklashEnable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerBacklashEnable command which is used to Enable the backlash. Refer to the XPS Programmer's manual to get the command description.

### PositionerBacklashDisable

#### Syntax

##### C# prototype

int PositionerBacklashDisable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerBacklashDisable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerBacklashDisable command which is used to Disable the backlash. Refer to the XPS Programmer's manual to get the command description.

### PositionerMotionDoneGet

#### Syntax

##### C# prototype

int PositionerMotionDoneGet(string PositionerName, out double PositionWindow, out double VelocityWindow, out double CheckingTime, out double MeanPeriod, out double TimeOut, out string errstring)

##### Python prototype

[PositionWindow, VelocityWindow, CheckingTime, MeanPeriod, TimeOut, errstring] PositionerMotionDoneGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) PositionWindow: PositionWindow

(double) VelocityWindow: VelocityWindow

(double) CheckingTime: CheckingTime

(double) MeanPeriod: MeanPeriod

(double) TimeOut: TimeOut

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerMotionDoneGet command which is used to Read motion done parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerMotionDoneSet

#### Syntax

##### C# prototype

int PositionerMotionDoneSet(string PositionerName, double PositionWindow, double VelocityWindow, double CheckingTime, double MeanPeriod, double TimeOut, out string errstring)

##### Python prototype

[errstring] PositionerMotionDoneSet (PositionerName, PositionWindow, VelocityWindow, CheckingTime, MeanPeriod, TimeOut)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) PositionWindow: PositionWindow

(double) VelocityWindow: VelocityWindow

(double) CheckingTime: CheckingTime

(double) MeanPeriod: MeanPeriod

(double) TimeOut: TimeOut

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerMotionDoneSet command which is used to Update motion done parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerHardInterpolatorFactorGet

#### Syntax

##### C# prototype

int PositionerHardInterpolatorFactorGet(string PositionerName, out Int32 InterpolationFactor, out string errstring)

##### Python prototype

[InterpolationFactor, errstring] PositionerHardInterpolatorFactorGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(Int32\_i) InterpolationFactor: InterpolationFactor

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerHardInterpolatorFactorGet command which is used to Get hard interpolator parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerHardInterpolatorFactorSet

#### Syntax

##### C# prototype

int PositionerHardInterpolatorFactorSet(string PositionerName, Int32 InterpolationFactor, out string errstring)

##### Python prototype

[errstring] PositionerHardInterpolatorFactorSet (PositionerName, InterpolationFactor)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) InterpolationFactor: InterpolationFactor

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerHardInterpolatorFactorSet command which is used to Set hard interpolator parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerHardInterpolatorPositionGet

#### Syntax

##### C# prototype

int PositionerHardInterpolatorPositionGet(string PositionerName, out double Position, out string errstring)

##### Python prototype

[Position, errstring] PositionerHardInterpolatorPositionGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) Position: Position

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerHardInterpolatorPositionGet command which is used to Read external latch position. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareGet

#### Syntax

##### C# prototype

int PositionerPositionCompareGet(string PositionerName, out double MinimumPosition, out double MaximumPosition, out double PositionStep, out bool EnableState, out string errstring)

##### Python prototype

[MinimumPosition, MaximumPosition, PositionStep, EnableState, errstring] PositionerPositionCompareGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) PositionStep: PositionStep

(bool) EnableState: EnableState

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareGet command which is used to Read position compare parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareSet

#### Syntax

##### C# prototype

int PositionerPositionCompareSet(string PositionerName, double MinimumPosition, double MaximumPosition, double PositionStep, out string errstring)

##### Python prototype

[errstring] PositionerPositionCompareSet (PositionerName, MinimumPosition, MaximumPosition, PositionStep)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) PositionStep: PositionStep

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareSet command which is used to Set position compare parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareEnable

#### Syntax

##### C# prototype

int PositionerPositionCompareEnable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerPositionCompareEnable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareEnable command which is used to Enable position compare. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareDisable

#### Syntax

##### C# prototype

int PositionerPositionCompareDisable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerPositionCompareDisable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareDisable command which is used to Disable position compare. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareAquadBAlwaysEnable

#### Syntax

##### C# prototype

int PositionerPositionCompareAquadBAlwaysEnable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerPositionCompareAquadBAlwaysEnable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareAquadBAlwaysEnable command which is used to Enable AquadB signal in always mode. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareAquadBWindowedGet

#### Syntax

##### C# prototype

int PositionerPositionCompareAquadBWindowedGet(string PositionerName, out double MinimumPosition, out double MaximumPosition, out bool EnableState, out string errstring)

##### Python prototype

[MinimumPosition, MaximumPosition, EnableState, errstring] PositionerPositionCompareAquadBWindowedGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(bool) EnableState: EnableState

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareAquadBWindowedGet command which is used to Read position compare AquadB windowed parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareAquadBWindowedSet

#### Syntax

##### C# prototype

int PositionerPositionCompareAquadBWindowedSet(string PositionerName, double MinimumPosition, double MaximumPosition, out string errstring)

##### Python prototype

[errstring] PositionerPositionCompareAquadBWindowedSet (PositionerName, MinimumPosition, MaximumPosition)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareAquadBWindowedSet command which is used to Set position compare AquadB windowed parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerTimeFlasherGet

#### Syntax

##### C# prototype

int PositionerTimeFlasherGet(string PositionerName, out double MinimumPosition, out double MaximumPosition, out double PositionStep, out bool EnableState, out string errstring)

##### Python prototype

[MinimumPosition, MaximumPosition, PositionStep, EnableState, errstring] PositionerTimeFlasherGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) PositionStep: PositionStep

(bool) EnableState: EnableState

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerTimeFlasherGet command which is used to Read time flasher parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerTimeFlasherSet

#### Syntax

##### C# prototype

int PositionerTimeFlasherSet(string PositionerName, double MinimumPosition, double MaximumPosition, double TimeInterval, out string errstring)

##### Python prototype

[errstring] PositionerTimeFlasherSet (PositionerName, MinimumPosition, MaximumPosition, TimeInterval)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) TimeInterval: TimeInterval

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerTimeFlasherSet command which is used to Set time flasher parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerTimeFlasherEnable

#### Syntax

##### C# prototype

int PositionerTimeFlasherEnable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerTimeFlasherEnable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerTimeFlasherEnable command which is used to Enable time flasher. Refer to the XPS Programmer's manual to get the command description.

### PositionerTimeFlasherDisable

#### Syntax

##### C# prototype

int PositionerTimeFlasherDisable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerTimeFlasherDisable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerTimeFlasherDisable command which is used to Disable time flasher. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionComparePulseParametersGet

#### Syntax

##### C# prototype

int PositionerPositionComparePulseParametersGet(string PositionerName, out double PCOPulseWidth, out double EncoderSettlingTimeISAOnly, out string errstring)

##### Python prototype

[PCOPulseWidth, EncoderSettlingTimeISAOnly, errstring] PositionerPositionComparePulseParametersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) PCOPulseWidth: PCOPulseWidth

(double) EncoderSettlingTimeISAOnly: EncoderSettlingTimeISAOnly

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionComparePulseParametersGet command which is used to Get position compare PCO pulse parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionComparePulseParametersSet

#### Syntax

##### C# prototype

int PositionerPositionComparePulseParametersSet(string PositionerName, double PCOPulseWidth, double EncoderSettlingTimeISAOnly, out string errstring)

##### Python prototype

[errstring] PositionerPositionComparePulseParametersSet (PositionerName, PCOPulseWidth, EncoderSettlingTimeISAOnly)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) PCOPulseWidth: PCOPulseWidth

(double) EncoderSettlingTimeISAOnly: EncoderSettlingTimeISAOnly

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionComparePulseParametersSet command which is used to Set position compare PCO pulse parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareAquadBPrescalerSet

#### Syntax

##### C# prototype

int PositionerPositionCompareAquadBPrescalerSet(string PositionerName, double PCOInterpolationFactor, out string errstring)

##### Python prototype

[errstring] PositionerPositionCompareAquadBPrescalerSet (PositionerName, PCOInterpolationFactor)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) PCOInterpolationFactor: PCOInterpolationFactor

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareAquadBPrescalerSet command which is used to Set PCO AquadB Interpolation Factor . Refer to the XPS Programmer's manual to get the command description.

### PositionerPositionCompareAquadBPrescalerGet

#### Syntax

##### C# prototype

int PositionerPositionCompareAquadBPrescalerGet(string PositionerName, out double PCOInterpolationFactor, out string errstring)

##### Python prototype

[PCOInterpolationFactor, errstring] PositionerPositionCompareAquadBPrescalerGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) PCOInterpolationFactor: PCOInterpolationFactor

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerPositionCompareAquadBPrescalerGet command which is used to Get current PCO Interpolation Factor . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedPCOAbort

#### Syntax

##### C# prototype

int PositionerCompensatedPCOAbort(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedPCOAbort (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedPCOAbort command which is used to Abort CIE08 compensated PCO mode. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedPCOCurrentStatusGet

#### Syntax

##### C# prototype

int PositionerCompensatedPCOCurrentStatusGet(string PositionerName, out Int32 Status, out string errstring)

##### Python prototype

[Status, errstring] PositionerCompensatedPCOCurrentStatusGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(Int32\_i) Status: Status

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedPCOCurrentStatusGet command which is used to Get current status of CIE08 compensated PCO mode. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedPCOEnable

#### Syntax

##### C# prototype

int PositionerCompensatedPCOEnable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedPCOEnable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedPCOEnable command which is used to Enable CIE08 compensated PCO mode execution. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedPCOFromFile

#### Syntax

##### C# prototype

int PositionerCompensatedPCOFromFile(string PositionerName, string DataFileName, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedPCOFromFile (PositionerName, DataFileName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) DataFileName: DataFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedPCOFromFile command which is used to Load file to CIE08 compensated PCO data buffer. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedPCOLoadToMemory

#### Syntax

##### C# prototype

int PositionerCompensatedPCOLoadToMemory(string PositionerName, string DataLines, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedPCOLoadToMemory (PositionerName, DataLines)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) DataLines: DataLines

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedPCOLoadToMemory command which is used to Load data lines to CIE08 compensated PCO data buffer. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedPCOMemoryReset

#### Syntax

##### C# prototype

int PositionerCompensatedPCOMemoryReset(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedPCOMemoryReset (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedPCOMemoryReset command which is used to Reset CIE08 compensated PCO data buffer. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedPCOPrepare

#### Syntax

##### C# prototype

int PositionerCompensatedPCOPrepare(string PositionerName, Int32 ScanDirection, double[] StartPosition, Int32 nbItems, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedPCOPrepare (PositionerName, ScanDirection, StartPosition, nbItems)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) ScanDirection: ScanDirection

(double[]) StartPosition: StartPosition

(Int32) nbItems: nbItems

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedPCOPrepare command which is used to Prepare data for CIE08 compensated PCO mode. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedPCOSet

#### Syntax

##### C# prototype

int PositionerCompensatedPCOSet(string PositionerName, double Start, double Stop, double Distance, double Width, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedPCOSet (PositionerName, Start, Stop, Distance, Width)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) Start: Start

(double) Stop: Stop

(double) Distance: Distance

(double) Width: Width

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedPCOSet command which is used to Set data to CIE08 compensated PCO data buffer. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedFastPCOAbort

#### Syntax

##### C# prototype

int PositionerCompensatedFastPCOAbort(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedFastPCOAbort (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedFastPCOAbort command which is used to Abort fast compensated PCO mode. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedFastPCOCurrentStatusGet

#### Syntax

##### C# prototype

int PositionerCompensatedFastPCOCurrentStatusGet(string PositionerName, out Int32 Status, out string errstring)

##### Python prototype

[Status, errstring] PositionerCompensatedFastPCOCurrentStatusGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(Int32\_i) Status: Status

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedFastPCOCurrentStatusGet command which is used to Get current status of fast compensated PCO mode. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedFastPCOEnable

#### Syntax

##### C# prototype

int PositionerCompensatedFastPCOEnable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedFastPCOEnable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedFastPCOEnable command which is used to Enable fast compensated PCO mode execution. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedFastPCOFromFile

#### Syntax

##### C# prototype

int PositionerCompensatedFastPCOFromFile(string PositionerName, string DataFileName, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedFastPCOFromFile (PositionerName, DataFileName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) DataFileName: DataFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedFastPCOFromFile command which is used to Load file to fast compensated PCO data buffer. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedFastPCOLoadToMemory

#### Syntax

##### C# prototype

int PositionerCompensatedFastPCOLoadToMemory(string PositionerName, string DataLines, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedFastPCOLoadToMemory (PositionerName, DataLines)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) DataLines: DataLines

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedFastPCOLoadToMemory command which is used to Load data lines to fast compensated PCO data buffer. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedFastPCOMemoryReset

#### Syntax

##### C# prototype

int PositionerCompensatedFastPCOMemoryReset(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedFastPCOMemoryReset (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedFastPCOMemoryReset command which is used to Reset fast compensated PCO data buffer. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedFastPCOPrepare

#### Syntax

##### C# prototype

int PositionerCompensatedFastPCOPrepare(string PositionerName, Int32 ScanDirection, double[] StartPosition, Int32 nbItems, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedFastPCOPrepare (PositionerName, ScanDirection, StartPosition, nbItems)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) ScanDirection: ScanDirection

(double[]) StartPosition: StartPosition

(Int32) nbItems: nbItems

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedFastPCOPrepare command which is used to Prepare data for fast compensated PCO mode. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedFastPCOSet

#### Syntax

##### C# prototype

int PositionerCompensatedFastPCOSet(string PositionerName, double Start, double Stop, double Step, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedFastPCOSet (PositionerName, Start, Stop, Step)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) Start: Start

(double) Stop: Stop

(double) Step: Step

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedFastPCOSet command which is used to Set data to compensated PCO data buffer. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedFastPCOPulseParametersGet

#### Syntax

##### C# prototype

int PositionerCompensatedFastPCOPulseParametersGet(string PositionerName, out double PulseWidth, out Int32 PulsePolarity, out bool PulseToggle, out string errstring)

##### Python prototype

[PulseWidth, PulsePolarity, PulseToggle, errstring] PositionerCompensatedFastPCOPulseParametersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) PulseWidth: PulseWidth

(Int32\_i) PulsePolarity: PulsePolarity

(bool) PulseToggle: PulseToggle

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedFastPCOPulseParametersGet command which is used to Get pulse configuration to compensated PCO. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensatedFastPCOPulseParametersSet

#### Syntax

##### C# prototype

int PositionerCompensatedFastPCOPulseParametersSet(string PositionerName, double PulseWidth, Int32 PulsePolarity, bool PulseToggle, out string errstring)

##### Python prototype

[errstring] PositionerCompensatedFastPCOPulseParametersSet (PositionerName, PulseWidth, PulsePolarity, PulseToggle)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) PulseWidth: PulseWidth

(Int32) PulsePolarity: PulsePolarity

(bool) PulseToggle: PulseToggle

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensatedFastPCOPulseParametersSet command which is used to Set pulse configuration to compensated PCO. Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationEncoderNotchFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationEncoderNotchFilterSet(string PositionerName, Int32 NotchNumber, double NotchFrequency, double NotchBandwidth, double NotchGain, out string errstring)

##### Python prototype

[errstring] PositionerCompensationEncoderNotchFilterSet (PositionerName, NotchNumber, NotchFrequency, NotchBandwidth, NotchGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchNumber: NotchNumber

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationEncoderNotchFilterSet command which is used to Update Notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationEncoderNotchFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationEncoderNotchFilterGet(string PositionerName, Int32 NotchNumber, out double NotchFrequency, out double NotchBandwidth, out double NotchGain, out string errstring)

##### Python prototype

[NotchFrequency, NotchBandwidth, NotchGain, errstring] PositionerCompensationEncoderNotchFilterGet (PositionerName, NotchNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchNumber: NotchNumber

##### Output parameters

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationEncoderNotchFilterGet command which is used to Read Notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationNotchFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationNotchFilterSet(string PositionerName, Int32 NotchNumber, double NotchFrequency, double NotchBandwidth, double NotchGain, out string errstring)

##### Python prototype

[errstring] PositionerCompensationNotchFilterSet (PositionerName, NotchNumber, NotchFrequency, NotchBandwidth, NotchGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchNumber: NotchNumber

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationNotchFilterSet command which is used to Update Notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationNotchFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationNotchFilterGet(string PositionerName, Int32 NotchNumber, out double NotchFrequency, out double NotchBandwidth, out double NotchGain, out string errstring)

##### Python prototype

[NotchFrequency, NotchBandwidth, NotchGain, errstring] PositionerCompensationNotchFilterGet (PositionerName, NotchNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchNumber: NotchNumber

##### Output parameters

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationNotchFilterGet command which is used to Read Notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPhaseCorrectionFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationPhaseCorrectionFilterSet(string PositionerName, Int32 PhaseCorrectionFilterNumber, double PhaseCorrectionFn, double PhaseCorrectionFd, double PhaseCorrectionGain, out string errstring)

##### Python prototype

[errstring] PositionerCompensationPhaseCorrectionFilterSet (PositionerName, PhaseCorrectionFilterNumber, PhaseCorrectionFn, PhaseCorrectionFd, PhaseCorrectionGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) PhaseCorrectionFilterNumber: PhaseCorrectionFilterNumber

(double) PhaseCorrectionFn: PhaseCorrectionFn

(double) PhaseCorrectionFd: PhaseCorrectionFd

(double) PhaseCorrectionGain: PhaseCorrectionGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPhaseCorrectionFilterSet command which is used to Update one phase correction filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPhaseCorrectionFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationPhaseCorrectionFilterGet(string PositionerName, Int32 PhaseCorrectionFilterNumber, out double PhaseCorrectionFn, out double PhaseCorrectionFd, out double PhaseCorrectionGain, out string errstring)

##### Python prototype

[PhaseCorrectionFn, PhaseCorrectionFd, PhaseCorrectionGain, errstring] PositionerCompensationPhaseCorrectionFilterGet (PositionerName, PhaseCorrectionFilterNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) PhaseCorrectionFilterNumber: PhaseCorrectionFilterNumber

##### Output parameters

(double) PhaseCorrectionFn: PhaseCorrectionFn

(double) PhaseCorrectionFd: PhaseCorrectionFd

(double) PhaseCorrectionGain: PhaseCorrectionGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPhaseCorrectionFilterGet command which is used to Read one phase correction filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorNotchFiltersSet

#### Syntax

##### C# prototype

int PositionerCorrectorNotchFiltersSet(string PositionerName, double NotchFrequency1, double NotchBandwidth1, double NotchGain1, double NotchFrequency2, double NotchBandwidth2, double NotchGain2, out string errstring)

##### Python prototype

[errstring] PositionerCorrectorNotchFiltersSet (PositionerName, NotchFrequency1, NotchBandwidth1, NotchGain1, NotchFrequency2, NotchBandwidth2, NotchGain2)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) NotchFrequency1: NotchFrequency1

(double) NotchBandwidth1: NotchBandwidth1

(double) NotchGain1: NotchGain1

(double) NotchFrequency2: NotchFrequency2

(double) NotchBandwidth2: NotchBandwidth2

(double) NotchGain2: NotchGain2

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorNotchFiltersSet command which is used to Update filters parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCorrectorNotchFiltersGet

#### Syntax

##### C# prototype

int PositionerCorrectorNotchFiltersGet(string PositionerName, out double NotchFrequency1, out double NotchBandwidth1, out double NotchGain1, out double NotchFrequency2, out double NotchBandwidth2, out double NotchGain2, out string errstring)

##### Python prototype

[NotchFrequency1, NotchBandwidth1, NotchGain1, NotchFrequency2, NotchBandwidth2, NotchGain2, errstring] PositionerCorrectorNotchFiltersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) NotchFrequency1: NotchFrequency1

(double) NotchBandwidth1: NotchBandwidth1

(double) NotchGain1: NotchGain1

(double) NotchFrequency2: NotchFrequency2

(double) NotchBandwidth2: NotchBandwidth2

(double) NotchGain2: NotchGain2

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCorrectorNotchFiltersGet command which is used to Read filters parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPreFeedForwardFrequencyNotchFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationPreFeedForwardFrequencyNotchFilterGet(string PositionerName, Int32 NotchFrequencyNumber, out double NotchFrequency, out double NotchBandwidth, out double NotchGain, out string errstring)

##### Python prototype

[NotchFrequency, NotchBandwidth, NotchGain, errstring] PositionerCompensationPreFeedForwardFrequencyNotchFilterGet (PositionerName, NotchFrequencyNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchFrequencyNumber: NotchFrequencyNumber

##### Output parameters

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPreFeedForwardFrequencyNotchFilterGet command which is used to Read one frequency compensation notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPreFeedForwardFrequencyNotchFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationPreFeedForwardFrequencyNotchFilterSet(string PositionerName, Int32 NotchFrequencyNumber, double NotchFrequency, double NotchBandwidth, double NotchGain, out string errstring)

##### Python prototype

[errstring] PositionerCompensationPreFeedForwardFrequencyNotchFilterSet (PositionerName, NotchFrequencyNumber, NotchFrequency, NotchBandwidth, NotchGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchFrequencyNumber: NotchFrequencyNumber

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPreFeedForwardFrequencyNotchFilterSet command which is used to Update one frequency compensation notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPreFeedForwardSpatialNotchFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationPreFeedForwardSpatialNotchFilterGet(string PositionerName, Int32 SpatialNotchNumber, out double SpatialNotchStep, out double SpatialNotchBandwidth, out double SpatialNotchGain, out string errstring)

##### Python prototype

[SpatialNotchStep, SpatialNotchBandwidth, SpatialNotchGain, errstring] PositionerCompensationPreFeedForwardSpatialNotchFilterGet (PositionerName, SpatialNotchNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) SpatialNotchNumber: SpatialNotchNumber

##### Output parameters

(double) SpatialNotchStep: SpatialNotchStep

(double) SpatialNotchBandwidth: SpatialNotchBandwidth

(double) SpatialNotchGain: SpatialNotchGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPreFeedForwardSpatialNotchFilterGet command which is used to Read one spatial periodic compensation notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPreFeedForwardSpatialNotchFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationPreFeedForwardSpatialNotchFilterSet(string PositionerName, Int32 SpatialNotchNumber, double SpatialNotchStep, double SpatialNotchBandwidth, double SpatialNotchGain, out string errstring)

##### Python prototype

[errstring] PositionerCompensationPreFeedForwardSpatialNotchFilterSet (PositionerName, SpatialNotchNumber, SpatialNotchStep, SpatialNotchBandwidth, SpatialNotchGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) SpatialNotchNumber: SpatialNotchNumber

(double) SpatialNotchStep: SpatialNotchStep

(double) SpatialNotchBandwidth: SpatialNotchBandwidth

(double) SpatialNotchGain: SpatialNotchGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPreFeedForwardSpatialNotchFilterSet command which is used to Update one spatial periodic compensation notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPreFeedForwardPhaseCorrectionFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationPreFeedForwardPhaseCorrectionFilterGet(string PositionerName, Int32 PhaseCorrectionFilterNumber, out double PhaseCorrectionFn, out double PhaseCorrectionFd, out double PhaseCorrectionGain, out string errstring)

##### Python prototype

[PhaseCorrectionFn, PhaseCorrectionFd, PhaseCorrectionGain, errstring] PositionerCompensationPreFeedForwardPhaseCorrectionFilterGet (PositionerName, PhaseCorrectionFilterNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) PhaseCorrectionFilterNumber: PhaseCorrectionFilterNumber

##### Output parameters

(double) PhaseCorrectionFn: PhaseCorrectionFn

(double) PhaseCorrectionFd: PhaseCorrectionFd

(double) PhaseCorrectionGain: PhaseCorrectionGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPreFeedForwardPhaseCorrectionFilterGet command which is used to Read one phase correction filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPreFeedForwardPhaseCorrectionFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationPreFeedForwardPhaseCorrectionFilterSet(string PositionerName, Int32 PhaseCorrectionFilterNumber, double PhaseCorrectionFn, double PhaseCorrectionFd, double PhaseCorrectionGain, out string errstring)

##### Python prototype

[errstring] PositionerCompensationPreFeedForwardPhaseCorrectionFilterSet (PositionerName, PhaseCorrectionFilterNumber, PhaseCorrectionFn, PhaseCorrectionFd, PhaseCorrectionGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) PhaseCorrectionFilterNumber: PhaseCorrectionFilterNumber

(double) PhaseCorrectionFn: PhaseCorrectionFn

(double) PhaseCorrectionFd: PhaseCorrectionFd

(double) PhaseCorrectionGain: PhaseCorrectionGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPreFeedForwardPhaseCorrectionFilterSet command which is used to Update one phase correction filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationFrequencyNotchsGet

#### Syntax

##### C# prototype

int PositionerCompensationFrequencyNotchsGet(string PositionerName, out double NotchFrequency1, out double NotchBandwidth1, out double NotchGain1, out double NotchFrequency2, out double NotchBandwidth2, out double NotchGain2, out double NotchFrequency3, out double NotchBandwidth3, out double NotchGain3, out string errstring)

##### Python prototype

[NotchFrequency1, NotchBandwidth1, NotchGain1, NotchFrequency2, NotchBandwidth2, NotchGain2, NotchFrequency3, NotchBandwidth3, NotchGain3, errstring] PositionerCompensationFrequencyNotchsGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) NotchFrequency1: NotchFrequency1

(double) NotchBandwidth1: NotchBandwidth1

(double) NotchGain1: NotchGain1

(double) NotchFrequency2: NotchFrequency2

(double) NotchBandwidth2: NotchBandwidth2

(double) NotchGain2: NotchGain2

(double) NotchFrequency3: NotchFrequency3

(double) NotchBandwidth3: NotchBandwidth3

(double) NotchGain3: NotchGain3

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationFrequencyNotchsGet command which is used to Read frequency compensation notch filters parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationFrequencyNotchsSet

#### Syntax

##### C# prototype

int PositionerCompensationFrequencyNotchsSet(string PositionerName, double NotchFrequency1, double NotchBandwidth1, double NotchGain1, double NotchFrequency2, double NotchBandwidth2, double NotchGain2, double NotchFrequency3, double NotchBandwidth3, double NotchGain3, out string errstring)

##### Python prototype

[errstring] PositionerCompensationFrequencyNotchsSet (PositionerName, NotchFrequency1, NotchBandwidth1, NotchGain1, NotchFrequency2, NotchBandwidth2, NotchGain2, NotchFrequency3, NotchBandwidth3, NotchGain3)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) NotchFrequency1: NotchFrequency1

(double) NotchBandwidth1: NotchBandwidth1

(double) NotchGain1: NotchGain1

(double) NotchFrequency2: NotchFrequency2

(double) NotchBandwidth2: NotchBandwidth2

(double) NotchGain2: NotchGain2

(double) NotchFrequency3: NotchFrequency3

(double) NotchBandwidth3: NotchBandwidth3

(double) NotchGain3: NotchGain3

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationFrequencyNotchsSet command which is used to Update frequency compensation notch filters parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationSpatialPeriodicNotchsGet

#### Syntax

##### C# prototype

int PositionerCompensationSpatialPeriodicNotchsGet(string PositionerName, out double SpatialNotchStep1, out double SpatialNotchBandwidth1, out double SpatialNotchGain1, out double SpatialNotchStep2, out double SpatialNotchBandwidth2, out double SpatialNotchGain2, out double SpatialNotchStep3, out double SpatialNotchBandwidth3, out double SpatialNotchGain3, out string errstring)

##### Python prototype

[SpatialNotchStep1, SpatialNotchBandwidth1, SpatialNotchGain1, SpatialNotchStep2, SpatialNotchBandwidth2, SpatialNotchGain2, SpatialNotchStep3, SpatialNotchBandwidth3, SpatialNotchGain3, errstring] PositionerCompensationSpatialPeriodicNotchsGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) SpatialNotchStep1: SpatialNotchStep1

(double) SpatialNotchBandwidth1: SpatialNotchBandwidth1

(double) SpatialNotchGain1: SpatialNotchGain1

(double) SpatialNotchStep2: SpatialNotchStep2

(double) SpatialNotchBandwidth2: SpatialNotchBandwidth2

(double) SpatialNotchGain2: SpatialNotchGain2

(double) SpatialNotchStep3: SpatialNotchStep3

(double) SpatialNotchBandwidth3: SpatialNotchBandwidth3

(double) SpatialNotchGain3: SpatialNotchGain3

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationSpatialPeriodicNotchsGet command which is used to Read spatial compensation notch filters parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationSpatialPeriodicNotchsSet

#### Syntax

##### C# prototype

int PositionerCompensationSpatialPeriodicNotchsSet(string PositionerName, double SpatialNotchStep1, double SpatialNotchBandwidth1, double SpatialNotchGain1, double SpatialNotchStep2, double SpatialNotchBandwidth2, double SpatialNotchGain2, double SpatialNotchStep3, double SpatialNotchBandwidth3, double SpatialNotchGain3, out string errstring)

##### Python prototype

[errstring] PositionerCompensationSpatialPeriodicNotchsSet (PositionerName, SpatialNotchStep1, SpatialNotchBandwidth1, SpatialNotchGain1, SpatialNotchStep2, SpatialNotchBandwidth2, SpatialNotchGain2, SpatialNotchStep3, SpatialNotchBandwidth3, SpatialNotchGain3)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) SpatialNotchStep1: SpatialNotchStep1

(double) SpatialNotchBandwidth1: SpatialNotchBandwidth1

(double) SpatialNotchGain1: SpatialNotchGain1

(double) SpatialNotchStep2: SpatialNotchStep2

(double) SpatialNotchBandwidth2: SpatialNotchBandwidth2

(double) SpatialNotchGain2: SpatialNotchGain2

(double) SpatialNotchStep3: SpatialNotchStep3

(double) SpatialNotchBandwidth3: SpatialNotchBandwidth3

(double) SpatialNotchGain3: SpatialNotchGain3

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationSpatialPeriodicNotchsSet command which is used to Update spatial compensation notch filters parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPostExcitationLowPassFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationPostExcitationLowPassFilterGet(string PositionerName, out double CutOffFrequency, out string errstring)

##### Python prototype

[CutOffFrequency, errstring] PositionerCompensationPostExcitationLowPassFilterGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) CutOffFrequency: CutOffFrequency

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPostExcitationLowPassFilterGet command which is used to Read second order low-pass filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPostExcitationLowPassFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationPostExcitationLowPassFilterSet(string PositionerName, double CutOffFrequency, out string errstring)

##### Python prototype

[errstring] PositionerCompensationPostExcitationLowPassFilterSet (PositionerName, CutOffFrequency)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) CutOffFrequency: CutOffFrequency

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPostExcitationLowPassFilterSet command which is used to Update second order low-pass filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPostExcitationFrequencyNotchFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationPostExcitationFrequencyNotchFilterGet(string PositionerName, Int32 NotchFrequencyNumber, out double NotchFrequency, out double NotchBandwidth, out double NotchGain, out string errstring)

##### Python prototype

[NotchFrequency, NotchBandwidth, NotchGain, errstring] PositionerCompensationPostExcitationFrequencyNotchFilterGet (PositionerName, NotchFrequencyNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchFrequencyNumber: NotchFrequencyNumber

##### Output parameters

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPostExcitationFrequencyNotchFilterGet command which is used to Read one frequency compensation notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPostExcitationFrequencyNotchFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationPostExcitationFrequencyNotchFilterSet(string PositionerName, Int32 NotchFrequencyNumber, double NotchFrequency, double NotchBandwidth, double NotchGain, out string errstring)

##### Python prototype

[errstring] PositionerCompensationPostExcitationFrequencyNotchFilterSet (PositionerName, NotchFrequencyNumber, NotchFrequency, NotchBandwidth, NotchGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchFrequencyNumber: NotchFrequencyNumber

(double) NotchFrequency: NotchFrequency

(double) NotchBandwidth: NotchBandwidth

(double) NotchGain: NotchGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPostExcitationFrequencyNotchFilterSet command which is used to Update one frequency compensation notch filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPostExcitationNotchModeFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationPostExcitationNotchModeFilterGet(string PositionerName, Int32 NotchModeNumber, out double NotchModeFr, out double NotchModeFa, out double NotchModeZr, out double NotchModeZa, out string errstring)

##### Python prototype

[NotchModeFr, NotchModeFa, NotchModeZr, NotchModeZa, errstring] PositionerCompensationPostExcitationNotchModeFilterGet (PositionerName, NotchModeNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchModeNumber: NotchModeNumber

##### Output parameters

(double) NotchModeFr: NotchModeFr

(double) NotchModeFa: NotchModeFa

(double) NotchModeZr: NotchModeZr

(double) NotchModeZa: NotchModeZa

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPostExcitationNotchModeFilterGet command which is used to Read a notch mode filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPostExcitationNotchModeFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationPostExcitationNotchModeFilterSet(string PositionerName, Int32 NotchModeNumber, double NotchModeFr, double NotchModeFa, double NotchModeZr, double NotchModeZa, out string errstring)

##### Python prototype

[errstring] PositionerCompensationPostExcitationNotchModeFilterSet (PositionerName, NotchModeNumber, NotchModeFr, NotchModeFa, NotchModeZr, NotchModeZa)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) NotchModeNumber: NotchModeNumber

(double) NotchModeFr: NotchModeFr

(double) NotchModeFa: NotchModeFa

(double) NotchModeZr: NotchModeZr

(double) NotchModeZa: NotchModeZa

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPostExcitationNotchModeFilterSet command which is used to Update a notch mode filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPostExcitationPhaseCorrectionFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationPostExcitationPhaseCorrectionFilterGet(string PositionerName, Int32 PhaseCorrectionFilterNumber, out double PhaseCorrectionFn, out double PhaseCorrectionFd, out double PhaseCorrectionGain, out string errstring)

##### Python prototype

[PhaseCorrectionFn, PhaseCorrectionFd, PhaseCorrectionGain, errstring] PositionerCompensationPostExcitationPhaseCorrectionFilterGet (PositionerName, PhaseCorrectionFilterNumber)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) PhaseCorrectionFilterNumber: PhaseCorrectionFilterNumber

##### Output parameters

(double) PhaseCorrectionFn: PhaseCorrectionFn

(double) PhaseCorrectionFd: PhaseCorrectionFd

(double) PhaseCorrectionGain: PhaseCorrectionGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPostExcitationPhaseCorrectionFilterGet command which is used to Read one phase correction filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPostExcitationPhaseCorrectionFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationPostExcitationPhaseCorrectionFilterSet(string PositionerName, Int32 PhaseCorrectionFilterNumber, double PhaseCorrectionFn, double PhaseCorrectionFd, double PhaseCorrectionGain, out string errstring)

##### Python prototype

[errstring] PositionerCompensationPostExcitationPhaseCorrectionFilterSet (PositionerName, PhaseCorrectionFilterNumber, PhaseCorrectionFn, PhaseCorrectionFd, PhaseCorrectionGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) PhaseCorrectionFilterNumber: PhaseCorrectionFilterNumber

(double) PhaseCorrectionFn: PhaseCorrectionFn

(double) PhaseCorrectionFd: PhaseCorrectionFd

(double) PhaseCorrectionGain: PhaseCorrectionGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPostExcitationPhaseCorrectionFilterSet command which is used to Update one phase correction filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationLowPassTwoFilterGet

#### Syntax

##### C# prototype

int PositionerCompensationLowPassTwoFilterGet(string PositionerName, out double CutOffFrequency, out string errstring)

##### Python prototype

[CutOffFrequency, errstring] PositionerCompensationLowPassTwoFilterGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) CutOffFrequency: CutOffFrequency

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationLowPassTwoFilterGet command which is used to Read second order low-pass filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationLowPassTwoFilterSet

#### Syntax

##### C# prototype

int PositionerCompensationLowPassTwoFilterSet(string PositionerName, double CutOffFrequency, out string errstring)

##### Python prototype

[errstring] PositionerCompensationLowPassTwoFilterSet (PositionerName, CutOffFrequency)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) CutOffFrequency: CutOffFrequency

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationLowPassTwoFilterSet command which is used to Update second order low-pass filter parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationNotchModeFiltersGet

#### Syntax

##### C# prototype

int PositionerCompensationNotchModeFiltersGet(string PositionerName, out double NotchModeFr1, out double NotchModeFa1, out double NotchModeZr1, out double NotchModeZa1, out double NotchModeFr2, out double NotchModeFa2, out double NotchModeZr2, out double NotchModeZa2, out string errstring)

##### Python prototype

[NotchModeFr1, NotchModeFa1, NotchModeZr1, NotchModeZa1, NotchModeFr2, NotchModeFa2, NotchModeZr2, NotchModeZa2, errstring] PositionerCompensationNotchModeFiltersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) NotchModeFr1: NotchModeFr1

(double) NotchModeFa1: NotchModeFa1

(double) NotchModeZr1: NotchModeZr1

(double) NotchModeZa1: NotchModeZa1

(double) NotchModeFr2: NotchModeFr2

(double) NotchModeFa2: NotchModeFa2

(double) NotchModeZr2: NotchModeZr2

(double) NotchModeZa2: NotchModeZa2

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationNotchModeFiltersGet command which is used to Read notch mode filters parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationNotchModeFiltersSet

#### Syntax

##### C# prototype

int PositionerCompensationNotchModeFiltersSet(string PositionerName, double NotchModeFr1, double NotchModeFa1, double NotchModeZr1, double NotchModeZa1, double NotchModeFr2, double NotchModeFa2, double NotchModeZr2, double NotchModeZa2, out string errstring)

##### Python prototype

[errstring] PositionerCompensationNotchModeFiltersSet (PositionerName, NotchModeFr1, NotchModeFa1, NotchModeZr1, NotchModeZa1, NotchModeFr2, NotchModeFa2, NotchModeZr2, NotchModeZa2)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) NotchModeFr1: NotchModeFr1

(double) NotchModeFa1: NotchModeFa1

(double) NotchModeZr1: NotchModeZr1

(double) NotchModeZa1: NotchModeZa1

(double) NotchModeFr2: NotchModeFr2

(double) NotchModeFa2: NotchModeFa2

(double) NotchModeZr2: NotchModeZr2

(double) NotchModeZa2: NotchModeZa2

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationNotchModeFiltersSet command which is used to Update notch mode filters parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPhaseCorrectionFiltersGet

#### Syntax

##### C# prototype

int PositionerCompensationPhaseCorrectionFiltersGet(string PositionerName, out double PhaseCorrectionFn1, out double PhaseCorrectionFd1, out double PhaseCorrectionGain1, out double PhaseCorrectionFn2, out double PhaseCorrectionFd2, out double PhaseCorrectionGain2, out string errstring)

##### Python prototype

[PhaseCorrectionFn1, PhaseCorrectionFd1, PhaseCorrectionGain1, PhaseCorrectionFn2, PhaseCorrectionFd2, PhaseCorrectionGain2, errstring] PositionerCompensationPhaseCorrectionFiltersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) PhaseCorrectionFn1: PhaseCorrectionFn1

(double) PhaseCorrectionFd1: PhaseCorrectionFd1

(double) PhaseCorrectionGain1: PhaseCorrectionGain1

(double) PhaseCorrectionFn2: PhaseCorrectionFn2

(double) PhaseCorrectionFd2: PhaseCorrectionFd2

(double) PhaseCorrectionGain2: PhaseCorrectionGain2

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPhaseCorrectionFiltersGet command which is used to Read phase correction filters parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerCompensationPhaseCorrectionFiltersSet

#### Syntax

##### C# prototype

int PositionerCompensationPhaseCorrectionFiltersSet(string PositionerName, double PhaseCorrectionFn1, double PhaseCorrectionFd1, double PhaseCorrectionGain1, double PhaseCorrectionFn2, double PhaseCorrectionFd2, double PhaseCorrectionGain2, out string errstring)

##### Python prototype

[errstring] PositionerCompensationPhaseCorrectionFiltersSet (PositionerName, PhaseCorrectionFn1, PhaseCorrectionFd1, PhaseCorrectionGain1, PhaseCorrectionFn2, PhaseCorrectionFd2, PhaseCorrectionGain2)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) PhaseCorrectionFn1: PhaseCorrectionFn1

(double) PhaseCorrectionFd1: PhaseCorrectionFd1

(double) PhaseCorrectionGain1: PhaseCorrectionGain1

(double) PhaseCorrectionFn2: PhaseCorrectionFn2

(double) PhaseCorrectionFd2: PhaseCorrectionFd2

(double) PhaseCorrectionGain2: PhaseCorrectionGain2

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerCompensationPhaseCorrectionFiltersSet command which is used to Update phase correction filters parameters . Refer to the XPS Programmer's manual to get the command description.

### PositionerAnalogTrackingPositionParametersGet

#### Syntax

##### C# prototype

int PositionerAnalogTrackingPositionParametersGet(string PositionerName, out string GPIOName, out double Offset, out double Scale, out double Velocity, out double Acceleration, out string errstring)

##### Python prototype

[GPIOName, Offset, Scale, Velocity, Acceleration, errstring] PositionerAnalogTrackingPositionParametersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) GPIOName: GPIOName

(double) Offset: Offset

(double) Scale: Scale

(double) Velocity: Velocity

(double) Acceleration: Acceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerAnalogTrackingPositionParametersGet command which is used to Read dynamic parameters for one axe of a group for a future analog tracking position. Refer to the XPS Programmer's manual to get the command description.

### PositionerAnalogTrackingPositionParametersSet

#### Syntax

##### C# prototype

int PositionerAnalogTrackingPositionParametersSet(string PositionerName, string GPIOName, double Offset, double Scale, double Velocity, double Acceleration, out string errstring)

##### Python prototype

[errstring] PositionerAnalogTrackingPositionParametersSet (PositionerName, GPIOName, Offset, Scale, Velocity, Acceleration)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) GPIOName: GPIOName

(double) Offset: Offset

(double) Scale: Scale

(double) Velocity: Velocity

(double) Acceleration: Acceleration

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerAnalogTrackingPositionParametersSet command which is used to Update dynamic parameters for one axe of a group for a future analog tracking position. Refer to the XPS Programmer's manual to get the command description.

### PositionerAnalogTrackingVelocityParametersGet

#### Syntax

##### C# prototype

int PositionerAnalogTrackingVelocityParametersGet(string PositionerName, out string GPIOName, out double Offset, out double Scale, out double DeadBandThreshold, out Int32 Order, out double Velocity, out double Acceleration, out string errstring)

##### Python prototype

[GPIOName, Offset, Scale, DeadBandThreshold, Order, Velocity, Acceleration, errstring] PositionerAnalogTrackingVelocityParametersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) GPIOName: GPIOName

(double) Offset: Offset

(double) Scale: Scale

(double) DeadBandThreshold: DeadBandThreshold

(Int32\_i) Order: Order

(double) Velocity: Velocity

(double) Acceleration: Acceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerAnalogTrackingVelocityParametersGet command which is used to Read dynamic parameters for one axe of a group for a future analog tracking velocity. Refer to the XPS Programmer's manual to get the command description.

### PositionerAnalogTrackingVelocityParametersSet

#### Syntax

##### C# prototype

int PositionerAnalogTrackingVelocityParametersSet(string PositionerName, string GPIOName, double Offset, double Scale, double DeadBandThreshold, Int32 Order, double Velocity, double Acceleration, out string errstring)

##### Python prototype

[errstring] PositionerAnalogTrackingVelocityParametersSet (PositionerName, GPIOName, Offset, Scale, DeadBandThreshold, Order, Velocity, Acceleration)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) GPIOName: GPIOName

(double) Offset: Offset

(double) Scale: Scale

(double) DeadBandThreshold: DeadBandThreshold

(Int32) Order: Order

(double) Velocity: Velocity

(double) Acceleration: Acceleration

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerAnalogTrackingVelocityParametersSet command which is used to Update dynamic parameters for one axe of a group for a future analog tracking velocity. Refer to the XPS Programmer's manual to get the command description.

### PositionerJogMaximumVelocityAndAccelerationGet

#### Syntax

##### C# prototype

int PositionerJogMaximumVelocityAndAccelerationGet(string PositionerName, out double MaximumVelocity, out double MaximumAcceleration, out string errstring)

##### Python prototype

[MaximumVelocity, MaximumAcceleration, errstring] PositionerJogMaximumVelocityAndAccelerationGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) MaximumVelocity: MaximumVelocity

(double) MaximumAcceleration: MaximumAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerJogMaximumVelocityAndAccelerationGet command which is used to Return jog maximum velocity and acceleration of the positioner. Refer to the XPS Programmer's manual to get the command description.

### PositionerMaximumVelocityAndAccelerationGet

#### Syntax

##### C# prototype

int PositionerMaximumVelocityAndAccelerationGet(string PositionerName, out double MaximumVelocity, out double MaximumAcceleration, out string errstring)

##### Python prototype

[MaximumVelocity, MaximumAcceleration, errstring] PositionerMaximumVelocityAndAccelerationGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) MaximumVelocity: MaximumVelocity

(double) MaximumAcceleration: MaximumAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerMaximumVelocityAndAccelerationGet command which is used to Return maximum velocity and acceleration of the positioner. Refer to the XPS Programmer's manual to get the command description.

### PositionerUserTravelLimitsGet

#### Syntax

##### C# prototype

int PositionerUserTravelLimitsGet(string PositionerName, out double UserMinimumTarget, out double UserMaximumTarget, out string errstring)

##### Python prototype

[UserMinimumTarget, UserMaximumTarget, errstring] PositionerUserTravelLimitsGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) UserMinimumTarget: UserMinimumTarget

(double) UserMaximumTarget: UserMaximumTarget

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerUserTravelLimitsGet command which is used to Read UserMinimumTarget and UserMaximumTarget. Refer to the XPS Programmer's manual to get the command description.

### PositionerUserTravelLimitsSet

#### Syntax

##### C# prototype

int PositionerUserTravelLimitsSet(string PositionerName, double UserMinimumTarget, double UserMaximumTarget, out string errstring)

##### Python prototype

[errstring] PositionerUserTravelLimitsSet (PositionerName, UserMinimumTarget, UserMaximumTarget)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) UserMinimumTarget: UserMinimumTarget

(double) UserMaximumTarget: UserMaximumTarget

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerUserTravelLimitsSet command which is used to Update UserMinimumTarget and UserMaximumTarget. Refer to the XPS Programmer's manual to get the command description.

### PositionerSGammaExactVelocityAjustedDisplacementGet

#### Syntax

##### C# prototype

int PositionerSGammaExactVelocityAjustedDisplacementGet(string PositionerName, double DesiredDisplacement, out double AdjustedDisplacement, out string errstring)

##### Python prototype

[AdjustedDisplacement, errstring] PositionerSGammaExactVelocityAjustedDisplacementGet (PositionerName, DesiredDisplacement)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) DesiredDisplacement: DesiredDisplacement

##### Output parameters

(double) AdjustedDisplacement: AdjustedDisplacement

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerSGammaExactVelocityAjustedDisplacementGet command which is used to Return adjusted displacement to get exact velocity. Refer to the XPS Programmer's manual to get the command description.

### PositionerSGammaParametersGet

#### Syntax

##### C# prototype

int PositionerSGammaParametersGet(string PositionerName, out double Velocity, out double Acceleration, out double MinimumTjerkTime, out double MaximumTjerkTime, out string errstring)

##### Python prototype

[Velocity, Acceleration, MinimumTjerkTime, MaximumTjerkTime, errstring] PositionerSGammaParametersGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) Velocity: Velocity

(double) Acceleration: Acceleration

(double) MinimumTjerkTime: MinimumTjerkTime

(double) MaximumTjerkTime: MaximumTjerkTime

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerSGammaParametersGet command which is used to Read dynamic parameters for one axe of a group for a future displacement . Refer to the XPS Programmer's manual to get the command description.

### PositionerSGammaParametersSet

#### Syntax

##### C# prototype

int PositionerSGammaParametersSet(string PositionerName, double Velocity, double Acceleration, double MinimumTjerkTime, double MaximumTjerkTime, out string errstring)

##### Python prototype

[errstring] PositionerSGammaParametersSet (PositionerName, Velocity, Acceleration, MinimumTjerkTime, MaximumTjerkTime)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) Velocity: Velocity

(double) Acceleration: Acceleration

(double) MinimumTjerkTime: MinimumTjerkTime

(double) MaximumTjerkTime: MaximumTjerkTime

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerSGammaParametersSet command which is used to Update dynamic parameters for one axe of a group for a future displacement. Refer to the XPS Programmer's manual to get the command description.

### PositionerSGammaVelocityAndAccelerationSet

#### Syntax

##### C# prototype

int PositionerSGammaVelocityAndAccelerationSet(string PositionerName, double Velocity, double Acceleration, out string errstring)

##### Python prototype

[errstring] PositionerSGammaVelocityAndAccelerationSet (PositionerName, Velocity, Acceleration)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) Velocity: Velocity

(double) Acceleration: Acceleration

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerSGammaVelocityAndAccelerationSet command which is used to Update dynamic velocity and acceleration parameters for one axe of a group for a future displacement. Refer to the XPS Programmer's manual to get the command description.

### PositionerSGammaPreviousMotionTimesGet

#### Syntax

##### C# prototype

int PositionerSGammaPreviousMotionTimesGet(string PositionerName, out double SettingTime, out double SettlingTime, out string errstring)

##### Python prototype

[SettingTime, SettlingTime, errstring] PositionerSGammaPreviousMotionTimesGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) SettingTime: SettingTime

(double) SettlingTime: SettlingTime

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerSGammaPreviousMotionTimesGet command which is used to Read SettingTime and SettlingTime. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPTVerification

#### Syntax

##### C# prototype

int MultipleAxesPTVerification(string GroupName, string TrajectoryFileName, out string errstring)

##### Python prototype

[errstring] MultipleAxesPTVerification (GroupName, TrajectoryFileName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPTVerification command which is used to Multiple axes PT trajectory verification. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPTVerificationResultGet

#### Syntax

##### C# prototype

int MultipleAxesPTVerificationResultGet(string PositionerName, out string FileName, out double MinimumPosition, out double MaximumPosition, out double MaximumVelocity, out double MaximumAcceleration, out string errstring)

##### Python prototype

[FileName, MinimumPosition, MaximumPosition, MaximumVelocity, MaximumAcceleration, errstring] MultipleAxesPTVerificationResultGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) FileName: FileName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) MaximumVelocity: MaximumVelocity

(double) MaximumAcceleration: MaximumAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPTVerificationResultGet command which is used to Multiple axes PT trajectory verification result get. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPTExecution

#### Syntax

##### C# prototype

int MultipleAxesPTExecution(string GroupName, string TrajectoryFileName, Int32 ExecutionNumber, out string errstring)

##### Python prototype

[errstring] MultipleAxesPTExecution (GroupName, TrajectoryFileName, ExecutionNumber)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

(Int32) ExecutionNumber: ExecutionNumber

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPTExecution command which is used to Multiple axes PT trajectory execution. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPTParametersGet

#### Syntax

##### C# prototype

int MultipleAxesPTParametersGet(string GroupName, out string FileName, out Int32 CurrentElementNumber, out string errstring)

##### Python prototype

[FileName, CurrentElementNumber, errstring] MultipleAxesPTParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) FileName: FileName

(Int32\_i) CurrentElementNumber: CurrentElementNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPTParametersGet command which is used to Multiple axes PT trajectory get parameters. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPTPulseOutputSet

#### Syntax

##### C# prototype

int MultipleAxesPTPulseOutputSet(string GroupName, Int32 StartElement, Int32 EndElement, double TimeInterval, out string errstring)

##### Python prototype

[errstring] MultipleAxesPTPulseOutputSet (GroupName, StartElement, EndElement, TimeInterval)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) StartElement: StartElement

(Int32) EndElement: EndElement

(double) TimeInterval: TimeInterval

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPTPulseOutputSet command which is used to Configure pulse output on trajectory. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPTPulseOutputGet

#### Syntax

##### C# prototype

int MultipleAxesPTPulseOutputGet(string GroupName, out Int32 StartElement, out Int32 EndElement, out double TimeInterval, out string errstring)

##### Python prototype

[StartElement, EndElement, TimeInterval, errstring] MultipleAxesPTPulseOutputGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) StartElement: StartElement

(Int32\_i) EndElement: EndElement

(double) TimeInterval: TimeInterval

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPTPulseOutputGet command which is used to Get pulse output on trajectory configuration. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPTLoadToMemory

#### Syntax

##### C# prototype

int MultipleAxesPTLoadToMemory(string GroupName, string TrajectoryPart, out string errstring)

##### Python prototype

[errstring] MultipleAxesPTLoadToMemory (GroupName, TrajectoryPart)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryPart: TrajectoryPart

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPTLoadToMemory command which is used to Multiple Axes Load PT trajectory through function. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPTResetInMemory

#### Syntax

##### C# prototype

int MultipleAxesPTResetInMemory(string GroupName, out string errstring)

##### Python prototype

[errstring] MultipleAxesPTResetInMemory (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPTResetInMemory command which is used to Multiple Axes PT trajectory reset in memory. Refer to the XPS Programmer's manual to get the command description.

### XYPTVerification

#### Syntax

##### C# prototype

int XYPTVerification(string GroupName, string TrajectoryFileName, out string errstring)

##### Python prototype

[errstring] XYPTVerification (GroupName, TrajectoryFileName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPTVerification command which is used to XY PT trajectory verification. Refer to the XPS Programmer's manual to get the command description.

### XYPTVerificationResultGet

#### Syntax

##### C# prototype

int XYPTVerificationResultGet(string PositionerName, out string FileName, out double MinimumPosition, out double MaximumPosition, out double MaximumVelocity, out double MaximumAcceleration, out string errstring)

##### Python prototype

[FileName, MinimumPosition, MaximumPosition, MaximumVelocity, MaximumAcceleration, errstring] XYPTVerificationResultGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) FileName: FileName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) MaximumVelocity: MaximumVelocity

(double) MaximumAcceleration: MaximumAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPTVerificationResultGet command which is used to XY PT trajectory verification result get. Refer to the XPS Programmer's manual to get the command description.

### XYPTExecution

#### Syntax

##### C# prototype

int XYPTExecution(string GroupName, string TrajectoryFileName, Int32 ExecutionNumber, out string errstring)

##### Python prototype

[errstring] XYPTExecution (GroupName, TrajectoryFileName, ExecutionNumber)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

(Int32) ExecutionNumber: ExecutionNumber

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPTExecution command which is used to XY PT trajectory execution. Refer to the XPS Programmer's manual to get the command description.

### XYPTParametersGet

#### Syntax

##### C# prototype

int XYPTParametersGet(string GroupName, out string FileName, out Int32 CurrentElementNumber, out string errstring)

##### Python prototype

[FileName, CurrentElementNumber, errstring] XYPTParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) FileName: FileName

(Int32\_i) CurrentElementNumber: CurrentElementNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPTParametersGet command which is used to XY PT trajectory get parameters. Refer to the XPS Programmer's manual to get the command description.

### XYPTPulseOutputSet

#### Syntax

##### C# prototype

int XYPTPulseOutputSet(string GroupName, Int32 StartElement, Int32 EndElement, double TimeInterval, out string errstring)

##### Python prototype

[errstring] XYPTPulseOutputSet (GroupName, StartElement, EndElement, TimeInterval)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) StartElement: StartElement

(Int32) EndElement: EndElement

(double) TimeInterval: TimeInterval

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPTPulseOutputSet command which is used to Configure pulse output on trajectory. Refer to the XPS Programmer's manual to get the command description.

### XYPTPulseOutputGet

#### Syntax

##### C# prototype

int XYPTPulseOutputGet(string GroupName, out Int32 StartElement, out Int32 EndElement, out double TimeInterval, out string errstring)

##### Python prototype

[StartElement, EndElement, TimeInterval, errstring] XYPTPulseOutputGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) StartElement: StartElement

(Int32\_i) EndElement: EndElement

(double) TimeInterval: TimeInterval

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPTPulseOutputGet command which is used to Get pulse output on trajectory configuration. Refer to the XPS Programmer's manual to get the command description.

### XYPTLoadToMemory

#### Syntax

##### C# prototype

int XYPTLoadToMemory(string GroupName, string TrajectoryPart, out string errstring)

##### Python prototype

[errstring] XYPTLoadToMemory (GroupName, TrajectoryPart)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryPart: TrajectoryPart

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPTLoadToMemory command which is used to XY Load PT trajectory through function. Refer to the XPS Programmer's manual to get the command description.

### XYPTResetInMemory

#### Syntax

##### C# prototype

int XYPTResetInMemory(string GroupName, out string errstring)

##### Python prototype

[errstring] XYPTResetInMemory (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPTResetInMemory command which is used to XY PT trajectory reset in memory. Refer to the XPS Programmer's manual to get the command description.

### TZPTVerification

#### Syntax

##### C# prototype

int TZPTVerification(string GroupName, string TrajectoryFileName, out string errstring)

##### Python prototype

[errstring] TZPTVerification (GroupName, TrajectoryFileName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPTVerification command which is used to TZ PT trajectory verification. Refer to the XPS Programmer's manual to get the command description.

### TZPTVerificationResultGet

#### Syntax

##### C# prototype

int TZPTVerificationResultGet(string PositionerName, out string FileName, out double MinimumPosition, out double MaximumPosition, out double MaximumVelocity, out double MaximumAcceleration, out string errstring)

##### Python prototype

[FileName, MinimumPosition, MaximumPosition, MaximumVelocity, MaximumAcceleration, errstring] TZPTVerificationResultGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) FileName: FileName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) MaximumVelocity: MaximumVelocity

(double) MaximumAcceleration: MaximumAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPTVerificationResultGet command which is used to TZ PT trajectory verification result get. Refer to the XPS Programmer's manual to get the command description.

### TZPTExecution

#### Syntax

##### C# prototype

int TZPTExecution(string GroupName, string TrajectoryFileName, Int32 ExecutionNumber, out string errstring)

##### Python prototype

[errstring] TZPTExecution (GroupName, TrajectoryFileName, ExecutionNumber)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

(Int32) ExecutionNumber: ExecutionNumber

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPTExecution command which is used to TZ PT trajectory execution. Refer to the XPS Programmer's manual to get the command description.

### TZPTParametersGet

#### Syntax

##### C# prototype

int TZPTParametersGet(string GroupName, out string FileName, out Int32 CurrentElementNumber, out string errstring)

##### Python prototype

[FileName, CurrentElementNumber, errstring] TZPTParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) FileName: FileName

(Int32\_i) CurrentElementNumber: CurrentElementNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPTParametersGet command which is used to TZ PT trajectory get parameters. Refer to the XPS Programmer's manual to get the command description.

### TZPTPulseOutputSet

#### Syntax

##### C# prototype

int TZPTPulseOutputSet(string GroupName, Int32 StartElement, Int32 EndElement, double TimeInterval, out string errstring)

##### Python prototype

[errstring] TZPTPulseOutputSet (GroupName, StartElement, EndElement, TimeInterval)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) StartElement: StartElement

(Int32) EndElement: EndElement

(double) TimeInterval: TimeInterval

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPTPulseOutputSet command which is used to Configure pulse output on trajectory. Refer to the XPS Programmer's manual to get the command description.

### TZPTPulseOutputGet

#### Syntax

##### C# prototype

int TZPTPulseOutputGet(string GroupName, out Int32 StartElement, out Int32 EndElement, out double TimeInterval, out string errstring)

##### Python prototype

[StartElement, EndElement, TimeInterval, errstring] TZPTPulseOutputGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) StartElement: StartElement

(Int32\_i) EndElement: EndElement

(double) TimeInterval: TimeInterval

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPTPulseOutputGet command which is used to Get pulse output on trajectory configuration. Refer to the XPS Programmer's manual to get the command description.

### TZPTLoadToMemory

#### Syntax

##### C# prototype

int TZPTLoadToMemory(string GroupName, string TrajectoryPart, out string errstring)

##### Python prototype

[errstring] TZPTLoadToMemory (GroupName, TrajectoryPart)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryPart: TrajectoryPart

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPTLoadToMemory command which is used to TZ Load PT trajectory through function. Refer to the XPS Programmer's manual to get the command description.

### TZPTResetInMemory

#### Syntax

##### C# prototype

int TZPTResetInMemory(string GroupName, out string errstring)

##### Python prototype

[errstring] TZPTResetInMemory (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPTResetInMemory command which is used to TZ PT trajectory reset in memory. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPVTVerification

#### Syntax

##### C# prototype

int MultipleAxesPVTVerification(string GroupName, string TrajectoryFileName, out string errstring)

##### Python prototype

[errstring] MultipleAxesPVTVerification (GroupName, TrajectoryFileName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPVTVerification command which is used to Multiple axes PVT trajectory verification. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPVTVerificationResultGet

#### Syntax

##### C# prototype

int MultipleAxesPVTVerificationResultGet(string PositionerName, out string FileName, out double MinimumPosition, out double MaximumPosition, out double MaximumVelocity, out double MaximumAcceleration, out string errstring)

##### Python prototype

[FileName, MinimumPosition, MaximumPosition, MaximumVelocity, MaximumAcceleration, errstring] MultipleAxesPVTVerificationResultGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) FileName: FileName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) MaximumVelocity: MaximumVelocity

(double) MaximumAcceleration: MaximumAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPVTVerificationResultGet command which is used to Multiple axes PVT trajectory verification result get. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPVTExecution

#### Syntax

##### C# prototype

int MultipleAxesPVTExecution(string GroupName, string TrajectoryFileName, Int32 ExecutionNumber, out string errstring)

##### Python prototype

[errstring] MultipleAxesPVTExecution (GroupName, TrajectoryFileName, ExecutionNumber)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

(Int32) ExecutionNumber: ExecutionNumber

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPVTExecution command which is used to Multiple axes PVT trajectory execution. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPVTParametersGet

#### Syntax

##### C# prototype

int MultipleAxesPVTParametersGet(string GroupName, out string FileName, out Int32 CurrentElementNumber, out string errstring)

##### Python prototype

[FileName, CurrentElementNumber, errstring] MultipleAxesPVTParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) FileName: FileName

(Int32\_i) CurrentElementNumber: CurrentElementNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPVTParametersGet command which is used to Multiple axes PVT trajectory get parameters. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPVTPulseOutputSet

#### Syntax

##### C# prototype

int MultipleAxesPVTPulseOutputSet(string GroupName, Int32 StartElement, Int32 EndElement, double TimeInterval, out string errstring)

##### Python prototype

[errstring] MultipleAxesPVTPulseOutputSet (GroupName, StartElement, EndElement, TimeInterval)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) StartElement: StartElement

(Int32) EndElement: EndElement

(double) TimeInterval: TimeInterval

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPVTPulseOutputSet command which is used to Configure pulse output on trajectory. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPVTPulseOutputGet

#### Syntax

##### C# prototype

int MultipleAxesPVTPulseOutputGet(string GroupName, out Int32 StartElement, out Int32 EndElement, out double TimeInterval, out string errstring)

##### Python prototype

[StartElement, EndElement, TimeInterval, errstring] MultipleAxesPVTPulseOutputGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) StartElement: StartElement

(Int32\_i) EndElement: EndElement

(double) TimeInterval: TimeInterval

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPVTPulseOutputGet command which is used to Get pulse output on trajectory configuration. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPVTLoadToMemory

#### Syntax

##### C# prototype

int MultipleAxesPVTLoadToMemory(string GroupName, string TrajectoryPart, out string errstring)

##### Python prototype

[errstring] MultipleAxesPVTLoadToMemory (GroupName, TrajectoryPart)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryPart: TrajectoryPart

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPVTLoadToMemory command which is used to Multiple Axes Load PVT trajectory through function. Refer to the XPS Programmer's manual to get the command description.

### MultipleAxesPVTResetInMemory

#### Syntax

##### C# prototype

int MultipleAxesPVTResetInMemory(string GroupName, out string errstring)

##### Python prototype

[errstring] MultipleAxesPVTResetInMemory (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous MultipleAxesPVTResetInMemory command which is used to Multiple Axes PVT trajectory reset in memory. Refer to the XPS Programmer's manual to get the command description.

### XYPVTVerification

#### Syntax

##### C# prototype

int XYPVTVerification(string GroupName, string TrajectoryFileName, out string errstring)

##### Python prototype

[errstring] XYPVTVerification (GroupName, TrajectoryFileName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPVTVerification command which is used to XY PVT trajectory verification. Refer to the XPS Programmer's manual to get the command description.

### XYPVTVerificationResultGet

#### Syntax

##### C# prototype

int XYPVTVerificationResultGet(string PositionerName, out string FileName, out double MinimumPosition, out double MaximumPosition, out double MaximumVelocity, out double MaximumAcceleration, out string errstring)

##### Python prototype

[FileName, MinimumPosition, MaximumPosition, MaximumVelocity, MaximumAcceleration, errstring] XYPVTVerificationResultGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) FileName: FileName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) MaximumVelocity: MaximumVelocity

(double) MaximumAcceleration: MaximumAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPVTVerificationResultGet command which is used to XY PVT trajectory verification result get. Refer to the XPS Programmer's manual to get the command description.

### XYPVTExecution

#### Syntax

##### C# prototype

int XYPVTExecution(string GroupName, string TrajectoryFileName, Int32 ExecutionNumber, out string errstring)

##### Python prototype

[errstring] XYPVTExecution (GroupName, TrajectoryFileName, ExecutionNumber)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

(Int32) ExecutionNumber: ExecutionNumber

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPVTExecution command which is used to XY PVT trajectory execution. Refer to the XPS Programmer's manual to get the command description.

### XYPVTParametersGet

#### Syntax

##### C# prototype

int XYPVTParametersGet(string GroupName, out string FileName, out Int32 CurrentElementNumber, out string errstring)

##### Python prototype

[FileName, CurrentElementNumber, errstring] XYPVTParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) FileName: FileName

(Int32\_i) CurrentElementNumber: CurrentElementNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPVTParametersGet command which is used to XY PVT trajectory get parameters. Refer to the XPS Programmer's manual to get the command description.

### XYPVTPulseOutputSet

#### Syntax

##### C# prototype

int XYPVTPulseOutputSet(string GroupName, Int32 StartElement, Int32 EndElement, double TimeInterval, out string errstring)

##### Python prototype

[errstring] XYPVTPulseOutputSet (GroupName, StartElement, EndElement, TimeInterval)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) StartElement: StartElement

(Int32) EndElement: EndElement

(double) TimeInterval: TimeInterval

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPVTPulseOutputSet command which is used to Configure pulse output on trajectory. Refer to the XPS Programmer's manual to get the command description.

### XYPVTPulseOutputGet

#### Syntax

##### C# prototype

int XYPVTPulseOutputGet(string GroupName, out Int32 StartElement, out Int32 EndElement, out double TimeInterval, out string errstring)

##### Python prototype

[StartElement, EndElement, TimeInterval, errstring] XYPVTPulseOutputGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) StartElement: StartElement

(Int32\_i) EndElement: EndElement

(double) TimeInterval: TimeInterval

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPVTPulseOutputGet command which is used to Get pulse output on trajectory configuration. Refer to the XPS Programmer's manual to get the command description.

### XYPVTLoadToMemory

#### Syntax

##### C# prototype

int XYPVTLoadToMemory(string GroupName, string TrajectoryPart, out string errstring)

##### Python prototype

[errstring] XYPVTLoadToMemory (GroupName, TrajectoryPart)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryPart: TrajectoryPart

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPVTLoadToMemory command which is used to XY Load PVT trajectory through function. Refer to the XPS Programmer's manual to get the command description.

### XYPVTResetInMemory

#### Syntax

##### C# prototype

int XYPVTResetInMemory(string GroupName, out string errstring)

##### Python prototype

[errstring] XYPVTResetInMemory (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYPVTResetInMemory command which is used to XY PVT trajectory reset in memory. Refer to the XPS Programmer's manual to get the command description.

### TZPVTVerification

#### Syntax

##### C# prototype

int TZPVTVerification(string GroupName, string TrajectoryFileName, out string errstring)

##### Python prototype

[errstring] TZPVTVerification (GroupName, TrajectoryFileName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPVTVerification command which is used to TZ PVT trajectory verification. Refer to the XPS Programmer's manual to get the command description.

### TZPVTVerificationResultGet

#### Syntax

##### C# prototype

int TZPVTVerificationResultGet(string PositionerName, out string FileName, out double MinimumPosition, out double MaximumPosition, out double MaximumVelocity, out double MaximumAcceleration, out string errstring)

##### Python prototype

[FileName, MinimumPosition, MaximumPosition, MaximumVelocity, MaximumAcceleration, errstring] TZPVTVerificationResultGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) FileName: FileName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) MaximumVelocity: MaximumVelocity

(double) MaximumAcceleration: MaximumAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPVTVerificationResultGet command which is used to TZ PVT trajectory verification result get. Refer to the XPS Programmer's manual to get the command description.

### TZPVTExecution

#### Syntax

##### C# prototype

int TZPVTExecution(string GroupName, string TrajectoryFileName, Int32 ExecutionNumber, out string errstring)

##### Python prototype

[errstring] TZPVTExecution (GroupName, TrajectoryFileName, ExecutionNumber)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

(Int32) ExecutionNumber: ExecutionNumber

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPVTExecution command which is used to TZ PVT trajectory execution. Refer to the XPS Programmer's manual to get the command description.

### TZPVTParametersGet

#### Syntax

##### C# prototype

int TZPVTParametersGet(string GroupName, out string FileName, out Int32 CurrentElementNumber, out string errstring)

##### Python prototype

[FileName, CurrentElementNumber, errstring] TZPVTParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) FileName: FileName

(Int32\_i) CurrentElementNumber: CurrentElementNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPVTParametersGet command which is used to TZ PVT trajectory get parameters. Refer to the XPS Programmer's manual to get the command description.

### TZPVTPulseOutputSet

#### Syntax

##### C# prototype

int TZPVTPulseOutputSet(string GroupName, Int32 StartElement, Int32 EndElement, double TimeInterval, out string errstring)

##### Python prototype

[errstring] TZPVTPulseOutputSet (GroupName, StartElement, EndElement, TimeInterval)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) StartElement: StartElement

(Int32) EndElement: EndElement

(double) TimeInterval: TimeInterval

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPVTPulseOutputSet command which is used to Configure pulse output on trajectory. Refer to the XPS Programmer's manual to get the command description.

### TZPVTPulseOutputGet

#### Syntax

##### C# prototype

int TZPVTPulseOutputGet(string GroupName, out Int32 StartElement, out Int32 EndElement, out double TimeInterval, out string errstring)

##### Python prototype

[StartElement, EndElement, TimeInterval, errstring] TZPVTPulseOutputGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) StartElement: StartElement

(Int32\_i) EndElement: EndElement

(double) TimeInterval: TimeInterval

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPVTPulseOutputGet command which is used to Get pulse output on trajectory configuration. Refer to the XPS Programmer's manual to get the command description.

### TZPVTLoadToMemory

#### Syntax

##### C# prototype

int TZPVTLoadToMemory(string GroupName, string TrajectoryPart, out string errstring)

##### Python prototype

[errstring] TZPVTLoadToMemory (GroupName, TrajectoryPart)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryPart: TrajectoryPart

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPVTLoadToMemory command which is used to TZ Load PVT trajectory through function. Refer to the XPS Programmer's manual to get the command description.

### TZPVTResetInMemory

#### Syntax

##### C# prototype

int TZPVTResetInMemory(string GroupName, out string errstring)

##### Python prototype

[errstring] TZPVTResetInMemory (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZPVTResetInMemory command which is used to TZ PVT trajectory reset in memory. Refer to the XPS Programmer's manual to get the command description.

### XYLineArcVerification

#### Syntax

##### C# prototype

int XYLineArcVerification(string GroupName, string TrajectoryFileName, out string errstring)

##### Python prototype

[errstring] XYLineArcVerification (GroupName, TrajectoryFileName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYLineArcVerification command which is used to XY trajectory verification. Refer to the XPS Programmer's manual to get the command description.

### XYLineArcVerificationResultGet

#### Syntax

##### C# prototype

int XYLineArcVerificationResultGet(string PositionerName, out string FileName, out double MinimumPosition, out double MaximumPosition, out double MaximumVelocity, out double MaximumAcceleration, out string errstring)

##### Python prototype

[FileName, MinimumPosition, MaximumPosition, MaximumVelocity, MaximumAcceleration, errstring] XYLineArcVerificationResultGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) FileName: FileName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) MaximumVelocity: MaximumVelocity

(double) MaximumAcceleration: MaximumAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYLineArcVerificationResultGet command which is used to XY trajectory verification result get. Refer to the XPS Programmer's manual to get the command description.

### XYLineArcExecution

#### Syntax

##### C# prototype

int XYLineArcExecution(string GroupName, string TrajectoryFileName, double Velocity, double Acceleration, Int32 ExecutionNumber, out string errstring)

##### Python prototype

[errstring] XYLineArcExecution (GroupName, TrajectoryFileName, Velocity, Acceleration, ExecutionNumber)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

(double) Velocity: Velocity

(double) Acceleration: Acceleration

(Int32) ExecutionNumber: ExecutionNumber

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYLineArcExecution command which is used to XY trajectory execution. Refer to the XPS Programmer's manual to get the command description.

### XYLineArcParametersGet

#### Syntax

##### C# prototype

int XYLineArcParametersGet(string GroupName, out string FileName, out double Velocity, out double Acceleration, out Int32 CurrentElementNumber, out string errstring)

##### Python prototype

[FileName, Velocity, Acceleration, CurrentElementNumber, errstring] XYLineArcParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) FileName: FileName

(double) Velocity: Velocity

(double) Acceleration: Acceleration

(Int32\_i) CurrentElementNumber: CurrentElementNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYLineArcParametersGet command which is used to XY trajectory get parameters. Refer to the XPS Programmer's manual to get the command description.

### XYLineArcPulseOutputSet

#### Syntax

##### C# prototype

int XYLineArcPulseOutputSet(string GroupName, double StartLength, double EndLength, double PathLengthInterval, out string errstring)

##### Python prototype

[errstring] XYLineArcPulseOutputSet (GroupName, StartLength, EndLength, PathLengthInterval)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) StartLength: StartLength

(double) EndLength: EndLength

(double) PathLengthInterval: PathLengthInterval

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYLineArcPulseOutputSet command which is used to Configure pulse output on trajectory. Refer to the XPS Programmer's manual to get the command description.

### XYLineArcPulseOutputGet

#### Syntax

##### C# prototype

int XYLineArcPulseOutputGet(string GroupName, out double StartLength, out double EndLength, out double PathLengthInterval, out string errstring)

##### Python prototype

[StartLength, EndLength, PathLengthInterval, errstring] XYLineArcPulseOutputGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) StartLength: StartLength

(double) EndLength: EndLength

(double) PathLengthInterval: PathLengthInterval

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYLineArcPulseOutputGet command which is used to Get pulse output on trajectory configuration. Refer to the XPS Programmer's manual to get the command description.

### XYZSplineVerification

#### Syntax

##### C# prototype

int XYZSplineVerification(string GroupName, string TrajectoryFileName, out string errstring)

##### Python prototype

[errstring] XYZSplineVerification (GroupName, TrajectoryFileName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYZSplineVerification command which is used to XYZ trajectory verifivation. Refer to the XPS Programmer's manual to get the command description.

### XYZSplineVerificationResultGet

#### Syntax

##### C# prototype

int XYZSplineVerificationResultGet(string PositionerName, out string FileName, out double MinimumPosition, out double MaximumPosition, out double MaximumVelocity, out double MaximumAcceleration, out string errstring)

##### Python prototype

[FileName, MinimumPosition, MaximumPosition, MaximumVelocity, MaximumAcceleration, errstring] XYZSplineVerificationResultGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) FileName: FileName

(double) MinimumPosition: MinimumPosition

(double) MaximumPosition: MaximumPosition

(double) MaximumVelocity: MaximumVelocity

(double) MaximumAcceleration: MaximumAcceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYZSplineVerificationResultGet command which is used to XYZ trajectory verification result get. Refer to the XPS Programmer's manual to get the command description.

### XYZSplineExecution

#### Syntax

##### C# prototype

int XYZSplineExecution(string GroupName, string TrajectoryFileName, double Velocity, double Acceleration, out string errstring)

##### Python prototype

[errstring] XYZSplineExecution (GroupName, TrajectoryFileName, Velocity, Acceleration)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TrajectoryFileName: TrajectoryFileName

(double) Velocity: Velocity

(double) Acceleration: Acceleration

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYZSplineExecution command which is used to XYZ trajectory execution. Refer to the XPS Programmer's manual to get the command description.

### XYZSplineParametersGet

#### Syntax

##### C# prototype

int XYZSplineParametersGet(string GroupName, out string FileName, out double Velocity, out double Acceleration, out Int32 CurrentElementNumber, out string errstring)

##### Python prototype

[FileName, Velocity, Acceleration, CurrentElementNumber, errstring] XYZSplineParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) FileName: FileName

(double) Velocity: Velocity

(double) Acceleration: Acceleration

(Int32\_i) CurrentElementNumber: CurrentElementNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYZSplineParametersGet command which is used to XYZ trajectory get parameters. Refer to the XPS Programmer's manual to get the command description.

### XYZSplinePulseOutputSet

#### Syntax

##### C# prototype

int XYZSplinePulseOutputSet(string GroupName, double StartLength, double EndLength, double PathLengthInterval, out string errstring)

##### Python prototype

[errstring] XYZSplinePulseOutputSet (GroupName, StartLength, EndLength, PathLengthInterval)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) StartLength: StartLength

(double) EndLength: EndLength

(double) PathLengthInterval: PathLengthInterval

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYZSplinePulseOutputSet command which is used to Configure pulse output on trajectory. Refer to the XPS Programmer's manual to get the command description.

### XYZSplinePulseOutputGet

#### Syntax

##### C# prototype

int XYZSplinePulseOutputGet(string GroupName, out double StartLength, out double EndLength, out double PathLengthInterval, out string errstring)

##### Python prototype

[StartLength, EndLength, PathLengthInterval, errstring] XYZSplinePulseOutputGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) StartLength: StartLength

(double) EndLength: EndLength

(double) PathLengthInterval: PathLengthInterval

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYZSplinePulseOutputGet command which is used to Get pulse output on trajectory configuration. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisSlaveModeEnable

#### Syntax

##### C# prototype

int SingleAxisSlaveModeEnable(string GroupName, out string errstring)

##### Python prototype

[errstring] SingleAxisSlaveModeEnable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisSlaveModeEnable command which is used to Enable the slave mode. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisSlaveModeDisable

#### Syntax

##### C# prototype

int SingleAxisSlaveModeDisable(string GroupName, out string errstring)

##### Python prototype

[errstring] SingleAxisSlaveModeDisable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisSlaveModeDisable command which is used to Disable the slave mode. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisSlaveParametersSet

#### Syntax

##### C# prototype

int SingleAxisSlaveParametersSet(string GroupName, string PositionerName, double Ratio, out string errstring)

##### Python prototype

[errstring] SingleAxisSlaveParametersSet (GroupName, PositionerName, Ratio)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) PositionerName: PositionerName

(double) Ratio: Ratio

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisSlaveParametersSet command which is used to Set slave parameters. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisSlaveParametersGet

#### Syntax

##### C# prototype

int SingleAxisSlaveParametersGet(string GroupName, out string PositionerName, out double Ratio, out string errstring)

##### Python prototype

[PositionerName, Ratio, errstring] SingleAxisSlaveParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) PositionerName: PositionerName

(double) Ratio: Ratio

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisSlaveParametersGet command which is used to Get slave parameters. Refer to the XPS Programmer's manual to get the command description.

### SpindleSlaveModeEnable

#### Syntax

##### C# prototype

int SpindleSlaveModeEnable(string GroupName, out string errstring)

##### Python prototype

[errstring] SpindleSlaveModeEnable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SpindleSlaveModeEnable command which is used to Enable the slave mode. Refer to the XPS Programmer's manual to get the command description.

### SpindleSlaveModeDisable

#### Syntax

##### C# prototype

int SpindleSlaveModeDisable(string GroupName, out string errstring)

##### Python prototype

[errstring] SpindleSlaveModeDisable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SpindleSlaveModeDisable command which is used to Disable the slave mode. Refer to the XPS Programmer's manual to get the command description.

### SpindleSlaveParametersSet

#### Syntax

##### C# prototype

int SpindleSlaveParametersSet(string GroupName, string PositionerName, double Ratio, out string errstring)

##### Python prototype

[errstring] SpindleSlaveParametersSet (GroupName, PositionerName, Ratio)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) PositionerName: PositionerName

(double) Ratio: Ratio

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SpindleSlaveParametersSet command which is used to Set slave parameters. Refer to the XPS Programmer's manual to get the command description.

### SpindleSlaveParametersGet

#### Syntax

##### C# prototype

int SpindleSlaveParametersGet(string GroupName, out string PositionerName, out double Ratio, out string errstring)

##### Python prototype

[PositionerName, Ratio, errstring] SpindleSlaveParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) PositionerName: PositionerName

(double) Ratio: Ratio

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SpindleSlaveParametersGet command which is used to Get slave parameters. Refer to the XPS Programmer's manual to get the command description.

### GroupSpinParametersSet

#### Syntax

##### C# prototype

int GroupSpinParametersSet(string GroupName, double Velocity, double Acceleration, out string errstring)

##### Python prototype

[errstring] GroupSpinParametersSet (GroupName, Velocity, Acceleration)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) Velocity: Velocity

(double) Acceleration: Acceleration

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupSpinParametersSet command which is used to Modify Spin parameters on selected group and activate the continuous move. Refer to the XPS Programmer's manual to get the command description.

### GroupSpinParametersGet

#### Syntax

##### C# prototype

int GroupSpinParametersGet(string GroupName, out double Velocity, out double Acceleration, out string errstring)

##### Python prototype

[Velocity, Acceleration, errstring] GroupSpinParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) Velocity: Velocity

(double) Acceleration: Acceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupSpinParametersGet command which is used to Get Spin parameters on selected group. Refer to the XPS Programmer's manual to get the command description.

### GroupSpinCurrentGet

#### Syntax

##### C# prototype

int GroupSpinCurrentGet(string GroupName, out double Velocity, out double Acceleration, out string errstring)

##### Python prototype

[Velocity, Acceleration, errstring] GroupSpinCurrentGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) Velocity: Velocity

(double) Acceleration: Acceleration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupSpinCurrentGet command which is used to Get Spin current on selected group. Refer to the XPS Programmer's manual to get the command description.

### GroupSpinModeStop

#### Syntax

##### C# prototype

int GroupSpinModeStop(string GroupName, double Acceleration, out string errstring)

##### Python prototype

[errstring] GroupSpinModeStop (GroupName, Acceleration)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) Acceleration: Acceleration

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupSpinModeStop command which is used to Stop Spin mode on selected group with specified acceleration. Refer to the XPS Programmer's manual to get the command description.

### PositionerFeedforwardAccDisable

#### Syntax

##### C# prototype

int PositionerFeedforwardAccDisable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerFeedforwardAccDisable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerFeedforwardAccDisable command which is used to Disable XY Feed forward Acceleration feature. Refer to the XPS Programmer's manual to get the command description.

### PositionerFeedforwardAccEnable

#### Syntax

##### C# prototype

int PositionerFeedforwardAccEnable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerFeedforwardAccEnable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerFeedforwardAccEnable command which is used to Enable XY Feed forward Acceleration feature. Refer to the XPS Programmer's manual to get the command description.

### PositionerFeedforwardAccGet

#### Syntax

##### C# prototype

int PositionerFeedforwardAccGet(string PositionerName, out string OutputName1, out double Scale1, out string OutputName2, out double Scale2, out string errstring)

##### Python prototype

[OutputName1, Scale1, OutputName2, Scale2, errstring] PositionerFeedforwardAccGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) OutputName1: OutputName1

(double) Scale1: Scale1

(string) OutputName2: OutputName2

(double) Scale2: Scale2

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerFeedforwardAccGet command which is used to Get XY Feed forward Acceleration parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerFeedforwardAccSet

#### Syntax

##### C# prototype

int PositionerFeedforwardAccSet(string PositionerName, string OutputName1, double Scale1, string OutputName2, double Scale2, out string errstring)

##### Python prototype

[errstring] PositionerFeedforwardAccSet (PositionerName, OutputName1, Scale1, OutputName2, Scale2)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) OutputName1: OutputName1

(double) Scale1: Scale1

(string) OutputName2: OutputName2

(double) Scale2: Scale2

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerFeedforwardAccSet command which is used to Set XY Feed forward Acceleration parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerFeedforwardPositionDisable

#### Syntax

##### C# prototype

int PositionerFeedforwardPositionDisable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerFeedforwardPositionDisable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerFeedforwardPositionDisable command which is used to Disable XY Feed forward Position feature. Refer to the XPS Programmer's manual to get the command description.

### PositionerFeedforwardPositionEnable

#### Syntax

##### C# prototype

int PositionerFeedforwardPositionEnable(string PositionerName, out string errstring)

##### Python prototype

[errstring] PositionerFeedforwardPositionEnable (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerFeedforwardPositionEnable command which is used to Enable XY Feed forward Position feature. Refer to the XPS Programmer's manual to get the command description.

### PositionerFeedforwardPositionGet

#### Syntax

##### C# prototype

int PositionerFeedforwardPositionGet(string PositionerName, out string OutputName, out double Scale, out double Offset, out string errstring)

##### Python prototype

[OutputName, Scale, Offset, errstring] PositionerFeedforwardPositionGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(string) OutputName: OutputName

(double) Scale: Scale

(double) Offset: Offset

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerFeedforwardPositionGet command which is used to Get XY Feed forward Position parameters. Refer to the XPS Programmer's manual to get the command description.

### PositionerFeedforwardPositionSet

#### Syntax

##### C# prototype

int PositionerFeedforwardPositionSet(string PositionerName, string OutputName, double Scale, double Offset, out string errstring)

##### Python prototype

[errstring] PositionerFeedforwardPositionSet (PositionerName, OutputName, Scale, Offset)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(string) OutputName: OutputName

(double) Scale: Scale

(double) Offset: Offset

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerFeedforwardPositionSet command which is used to Set XY Feed forward Position parameters. Refer to the XPS Programmer's manual to get the command description.

### GroupBrakeSet

#### Syntax

##### C# prototype

int GroupBrakeSet(string GroupName, Int32 Command, out string errstring)

##### Python prototype

[errstring] GroupBrakeSet (GroupName, Command)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) Command: Command

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupBrakeSet command which is used to Set Brake command . Refer to the XPS Programmer's manual to get the command description.

### GroupBrakeStateGet

#### Syntax

##### C# prototype

int GroupBrakeStateGet(string GroupName, out Int32 CommandState, out string errstring)

##### Python prototype

[CommandState, errstring] GroupBrakeStateGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) CommandState: CommandState

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupBrakeStateGet command which is used to Get current Brake State . Refer to the XPS Programmer's manual to get the command description.

### XYCrossTalkCompensationMotorDecouplingSet

#### Syntax

##### C# prototype

int XYCrossTalkCompensationMotorDecouplingSet(string GroupName, Int32 Mode, double YToX1FFAccRatio, double YToX2FFAccRatio, double X1ToYFFAccRatio, double X2ToYFFAccRatio, out string errstring)

##### Python prototype

[errstring] XYCrossTalkCompensationMotorDecouplingSet (GroupName, Mode, YToX1FFAccRatio, YToX2FFAccRatio, X1ToYFFAccRatio, X2ToYFFAccRatio)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) Mode: Mode

(double) YToX1FFAccRatio: YToX1FFAccRatio

(double) YToX2FFAccRatio: YToX2FFAccRatio

(double) X1ToYFFAccRatio: X1ToYFFAccRatio

(double) X2ToYFFAccRatio: X2ToYFFAccRatio

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYCrossTalkCompensationMotorDecouplingSet command which is used to Set XY CrossTalkCompensation MotorDecoupling parameters. Refer to the XPS Programmer's manual to get the command description.

### XYCrossTalkCompensationMotorDecouplingGet

#### Syntax

##### C# prototype

int XYCrossTalkCompensationMotorDecouplingGet(string GroupName, out Int32 Mode, out double YToX1FFAccRatio, out double YToX2FFAccRatio, out double X1ToYFFAccRatio, out double X2ToYFFAccRatio, out string errstring)

##### Python prototype

[Mode, YToX1FFAccRatio, YToX2FFAccRatio, X1ToYFFAccRatio, X2ToYFFAccRatio, errstring] XYCrossTalkCompensationMotorDecouplingGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) Mode: Mode

(double) YToX1FFAccRatio: YToX1FFAccRatio

(double) YToX2FFAccRatio: YToX2FFAccRatio

(double) X1ToYFFAccRatio: X1ToYFFAccRatio

(double) X2ToYFFAccRatio: X2ToYFFAccRatio

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYCrossTalkCompensationMotorDecouplingGet command which is used to Get XY CrossTalkCompensation MotorDecoupling parameters. Refer to the XPS Programmer's manual to get the command description.

### XYGroupPositionPCORawEncoderGet

#### Syntax

##### C# prototype

int XYGroupPositionPCORawEncoderGet(string GroupName, double PositionX, double PositionY, out double PCORawPositionX, out double PCORawPositionY, out string errstring)

##### Python prototype

[PCORawPositionX, PCORawPositionY, errstring] XYGroupPositionPCORawEncoderGet (GroupName, PositionX, PositionY)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) PositionX: PositionX

(double) PositionY: PositionY

##### Output parameters

(double) PCORawPositionX: PCORawPositionX

(double) PCORawPositionY: PCORawPositionY

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYGroupPositionPCORawEncoderGet command which is used to Return PCO raw encoder positions. Refer to the XPS Programmer's manual to get the command description.

### XYGroupPositionCorrectedProfilerGet

#### Syntax

##### C# prototype

int XYGroupPositionCorrectedProfilerGet(string GroupName, double PositionX, double PositionY, out double CorrectedProfilerPositionX, out double CorrectedProfilerPositionY, out string errstring)

##### Python prototype

[CorrectedProfilerPositionX, CorrectedProfilerPositionY, errstring] XYGroupPositionCorrectedProfilerGet (GroupName, PositionX, PositionY)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) PositionX: PositionX

(double) PositionY: PositionY

##### Output parameters

(double) CorrectedProfilerPositionX: CorrectedProfilerPositionX

(double) CorrectedProfilerPositionY: CorrectedProfilerPositionY

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYGroupPositionCorrectedProfilerGet command which is used to Return corrected profiler positions. Refer to the XPS Programmer's manual to get the command description.

### XYMappingGet

#### Syntax

##### C# prototype

int XYMappingGet(string PositionerName, Int32 MappingNumber, Int32 LineNumber, out double[] Value, Int32 nbItems, out string errstring)

##### Python prototype

[Value, errstring] XYMappingGet (PositionerName, MappingNumber, LineNumber, nbItems)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) MappingNumber: MappingNumber

(Int32) LineNumber: LineNumber

(Int32) nbItems: nbItems

##### Output parameters

(double[]) Value: Value

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYMappingGet command which is used to Get a mapping line value. Refer to the XPS Programmer's manual to get the command description.

### XYMappingSet

#### Syntax

##### C# prototype

int XYMappingSet(string PositionerName, Int32 MappingNumber, Int32 LineNumber, double[] Value, Int32 nbItems, out string errstring)

##### Python prototype

[errstring] XYMappingSet (PositionerName, MappingNumber, LineNumber, Value, nbItems)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(Int32) MappingNumber: MappingNumber

(Int32) LineNumber: LineNumber

(double[]) Value: Value

(Int32) nbItems: nbItems

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYMappingSet command which is used to Set a mapping line value. Refer to the XPS Programmer's manual to get the command description.

### XYZGroupPositionCorrectedProfilerGet

#### Syntax

##### C# prototype

int XYZGroupPositionCorrectedProfilerGet(string GroupName, double PositionX, double PositionY, double PositionZ, out double CorrectedProfilerPositionX, out double CorrectedProfilerPositionY, out double CorrectedProfilerPositionZ, out string errstring)

##### Python prototype

[CorrectedProfilerPositionX, CorrectedProfilerPositionY, CorrectedProfilerPositionZ, errstring] XYZGroupPositionCorrectedProfilerGet (GroupName, PositionX, PositionY, PositionZ)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) PositionX: PositionX

(double) PositionY: PositionY

(double) PositionZ: PositionZ

##### Output parameters

(double) CorrectedProfilerPositionX: CorrectedProfilerPositionX

(double) CorrectedProfilerPositionY: CorrectedProfilerPositionY

(double) CorrectedProfilerPositionZ: CorrectedProfilerPositionZ

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYZGroupPositionCorrectedProfilerGet command which is used to Return corrected profiler positions. Refer to the XPS Programmer's manual to get the command description.

### XYZGroupPositionPCORawEncoderGet

#### Syntax

##### C# prototype

int XYZGroupPositionPCORawEncoderGet(string GroupName, double PositionX, double PositionY, double PositionZ, out double PCORawPositionX, out double PCORawPositionY, out double PCORawPositionZ, out string errstring)

##### Python prototype

[PCORawPositionX, PCORawPositionY, PCORawPositionZ, errstring] XYZGroupPositionPCORawEncoderGet (GroupName, PositionX, PositionY, PositionZ)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) PositionX: PositionX

(double) PositionY: PositionY

(double) PositionZ: PositionZ

##### Output parameters

(double) PCORawPositionX: PCORawPositionX

(double) PCORawPositionY: PCORawPositionY

(double) PCORawPositionZ: PCORawPositionZ

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous XYZGroupPositionPCORawEncoderGet command which is used to Return PCO raw encoder positions. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaClampDisable

#### Syntax

##### C# prototype

int SingleAxisThetaClampDisable(string GroupName, out string errstring)

##### Python prototype

[errstring] SingleAxisThetaClampDisable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaClampDisable command which is used to Set clamping disable on selected group. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaClampEnable

#### Syntax

##### C# prototype

int SingleAxisThetaClampEnable(string GroupName, out string errstring)

##### Python prototype

[errstring] SingleAxisThetaClampEnable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaClampEnable command which is used to Set clamping enable on selected group. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaFeedforwardParametersGet

#### Syntax

##### C# prototype

int SingleAxisThetaFeedforwardParametersGet(string GroupName, out double KFeedforwardX, out double KFeedforwardY, out string errstring)

##### Python prototype

[KFeedforwardX, KFeedforwardY, errstring] SingleAxisThetaFeedforwardParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) KFeedforwardX: KFeedforwardX

(double) KFeedforwardY: KFeedforwardY

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaFeedforwardParametersGet command which is used to Get XY to Theta feedforward gains. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaFeedforwardParametersSet

#### Syntax

##### C# prototype

int SingleAxisThetaFeedforwardParametersSet(string GroupName, double KFeedforwardX, double KFeedforwardY, out string errstring)

##### Python prototype

[errstring] SingleAxisThetaFeedforwardParametersSet (GroupName, KFeedforwardX, KFeedforwardY)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) KFeedforwardX: KFeedforwardX

(double) KFeedforwardY: KFeedforwardY

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaFeedforwardParametersSet command which is used to Set XY to Theta feedforward gains. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaFeedforwardJerkParametersGet

#### Syntax

##### C# prototype

int SingleAxisThetaFeedforwardJerkParametersGet(string GroupName, out double KFeedforwardJerkX, out double KFeedforwardJerkY, out string errstring)

##### Python prototype

[KFeedforwardJerkX, KFeedforwardJerkY, errstring] SingleAxisThetaFeedforwardJerkParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) KFeedforwardJerkX: KFeedforwardJerkX

(double) KFeedforwardJerkY: KFeedforwardJerkY

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaFeedforwardJerkParametersGet command which is used to Get XY to Theta feedforward acceleration gains. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaFeedforwardJerkParametersSet

#### Syntax

##### C# prototype

int SingleAxisThetaFeedforwardJerkParametersSet(string GroupName, double KFeedforwardJerkX, double KFeedforwardJerkY, out string errstring)

##### Python prototype

[errstring] SingleAxisThetaFeedforwardJerkParametersSet (GroupName, KFeedforwardJerkX, KFeedforwardJerkY)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) KFeedforwardJerkX: KFeedforwardJerkX

(double) KFeedforwardJerkY: KFeedforwardJerkY

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaFeedforwardJerkParametersSet command which is used to Set XY to Theta feedforward jerk gains. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaSlaveModeEnable

#### Syntax

##### C# prototype

int SingleAxisThetaSlaveModeEnable(string GroupName, out string errstring)

##### Python prototype

[errstring] SingleAxisThetaSlaveModeEnable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaSlaveModeEnable command which is used to Enable the slave mode. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaSlaveModeDisable

#### Syntax

##### C# prototype

int SingleAxisThetaSlaveModeDisable(string GroupName, out string errstring)

##### Python prototype

[errstring] SingleAxisThetaSlaveModeDisable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaSlaveModeDisable command which is used to Disable the slave mode. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaSlaveParametersGet

#### Syntax

##### C# prototype

int SingleAxisThetaSlaveParametersGet(string GroupName, out string PositionerName, out double Ratio, out string errstring)

##### Python prototype

[PositionerName, Ratio, errstring] SingleAxisThetaSlaveParametersGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) PositionerName: PositionerName

(double) Ratio: Ratio

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaSlaveParametersGet command which is used to Get slave parameters. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaSlaveParametersSet

#### Syntax

##### C# prototype

int SingleAxisThetaSlaveParametersSet(string GroupName, string PositionerName, double Ratio, out string errstring)

##### Python prototype

[errstring] SingleAxisThetaSlaveParametersSet (GroupName, PositionerName, Ratio)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) PositionerName: PositionerName

(double) Ratio: Ratio

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaSlaveParametersSet command which is used to Set slave parameters. Refer to the XPS Programmer's manual to get the command description.

### TZMotorDecouplingMatrixGet

#### Syntax

##### C# prototype

int TZMotorDecouplingMatrixGet(string GroupName, out double Value11, out double Value12, out double Value13, out double Value21, out double Value22, out double Value23, out double Value31, out double Value32, out double Value33, out string errstring)

##### Python prototype

[Value11, Value12, Value13, Value21, Value22, Value23, Value31, Value32, Value33, errstring] TZMotorDecouplingMatrixGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) Value11: Value11

(double) Value12: Value12

(double) Value13: Value13

(double) Value21: Value21

(double) Value22: Value22

(double) Value23: Value23

(double) Value31: Value31

(double) Value32: Value32

(double) Value33: Value33

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZMotorDecouplingMatrixGet command which is used to Get TZ motor decoupling matrix. Refer to the XPS Programmer's manual to get the command description.

### TZMotorDecouplingMatrixSet

#### Syntax

##### C# prototype

int TZMotorDecouplingMatrixSet(string GroupName, double Value11, double Value12, double Value13, double Value21, double Value22, double Value23, double Value31, double Value32, double Value33, out string errstring)

##### Python prototype

[errstring] TZMotorDecouplingMatrixSet (GroupName, Value11, Value12, Value13, Value21, Value22, Value23, Value31, Value32, Value33)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) Value11: Value11

(double) Value12: Value12

(double) Value13: Value13

(double) Value21: Value21

(double) Value22: Value22

(double) Value23: Value23

(double) Value31: Value31

(double) Value32: Value32

(double) Value33: Value33

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZMotorDecouplingMatrixSet command which is used to Set TZ motor decoupling matrix. Refer to the XPS Programmer's manual to get the command description.

### TZMotorDecouplingModeGet

#### Syntax

##### C# prototype

int TZMotorDecouplingModeGet(string GroupName, out Int32 Mode, out string errstring)

##### Python prototype

[Mode, errstring] TZMotorDecouplingModeGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) Mode: Mode

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZMotorDecouplingModeGet command which is used to Get TZ motor decoupling mode. Refer to the XPS Programmer's manual to get the command description.

### TZMotorDecouplingModeSet

#### Syntax

##### C# prototype

int TZMotorDecouplingModeSet(string GroupName, Int32 Mode, out string errstring)

##### Python prototype

[errstring] TZMotorDecouplingModeSet (GroupName, Mode)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) Mode: Mode

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZMotorDecouplingModeSet command which is used to Set TZ motor decoupling mode. Refer to the XPS Programmer's manual to get the command description.

### TZEncoderCouplingMatrixGet

#### Syntax

##### C# prototype

int TZEncoderCouplingMatrixGet(string GroupName, out double Value11, out double Value12, out double Value13, out double Value21, out double Value22, out double Value23, out double Value31, out double Value32, out double Value33, out string errstring)

##### Python prototype

[Value11, Value12, Value13, Value21, Value22, Value23, Value31, Value32, Value33, errstring] TZEncoderCouplingMatrixGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) Value11: Value11

(double) Value12: Value12

(double) Value13: Value13

(double) Value21: Value21

(double) Value22: Value22

(double) Value23: Value23

(double) Value31: Value31

(double) Value32: Value32

(double) Value33: Value33

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZEncoderCouplingMatrixGet command which is used to Get TZ encoder coupling matrix. Refer to the XPS Programmer's manual to get the command description.

### TZEncoderCouplingMatrixSet

#### Syntax

##### C# prototype

int TZEncoderCouplingMatrixSet(string GroupName, double Value11, double Value12, double Value13, double Value21, double Value22, double Value23, double Value31, double Value32, double Value33, out string errstring)

##### Python prototype

[errstring] TZEncoderCouplingMatrixSet (GroupName, Value11, Value12, Value13, Value21, Value22, Value23, Value31, Value32, Value33)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) Value11: Value11

(double) Value12: Value12

(double) Value13: Value13

(double) Value21: Value21

(double) Value22: Value22

(double) Value23: Value23

(double) Value31: Value31

(double) Value32: Value32

(double) Value33: Value33

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZEncoderCouplingMatrixSet command which is used to Set TZ encoder coupling matrix. Refer to the XPS Programmer's manual to get the command description.

### TZEncoderCouplingModeGet

#### Syntax

##### C# prototype

int TZEncoderCouplingModeGet(string GroupName, out Int32 Mode, out string errstring)

##### Python prototype

[Mode, errstring] TZEncoderCouplingModeGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) Mode: Mode

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZEncoderCouplingModeGet command which is used to Get TZ encoder coupling mode. Refer to the XPS Programmer's manual to get the command description.

### TZEncoderCouplingModeSet

#### Syntax

##### C# prototype

int TZEncoderCouplingModeSet(string GroupName, Int32 Mode, out string errstring)

##### Python prototype

[errstring] TZEncoderCouplingModeSet (GroupName, Mode)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) Mode: Mode

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZEncoderCouplingModeSet command which is used to Set TZ encoder coupling mode. Refer to the XPS Programmer's manual to get the command description.

### TZMappingModeGet

#### Syntax

##### C# prototype

int TZMappingModeGet(string GroupName, out Int32 Mode, out string errstring)

##### Python prototype

[Mode, errstring] TZMappingModeGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(Int32\_i) Mode: Mode

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZMappingModeGet command which is used to Get TZ mapping mode. Refer to the XPS Programmer's manual to get the command description.

### TZMappingModeSet

#### Syntax

##### C# prototype

int TZMappingModeSet(string GroupName, Int32 Mode, out string errstring)

##### Python prototype

[errstring] TZMappingModeSet (GroupName, Mode)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) Mode: Mode

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZMappingModeSet command which is used to Set TZ mapping mode. Refer to the XPS Programmer's manual to get the command description.

### TZTrackingCutOffFrequencyGet

#### Syntax

##### C# prototype

int TZTrackingCutOffFrequencyGet(string GroupName, out double CutOffFrequencyZ1, out double CutOffFrequencyZ2, out double CutOffFrequencyZ3, out string errstring)

##### Python prototype

[CutOffFrequencyZ1, CutOffFrequencyZ2, CutOffFrequencyZ3, errstring] TZTrackingCutOffFrequencyGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) CutOffFrequencyZ1: CutOffFrequencyZ1

(double) CutOffFrequencyZ2: CutOffFrequencyZ2

(double) CutOffFrequencyZ3: CutOffFrequencyZ3

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZTrackingCutOffFrequencyGet command which is used to Get cut-off frequency for tracking control. Refer to the XPS Programmer's manual to get the command description.

### TZTrackingCutOffFrequencySet

#### Syntax

##### C# prototype

int TZTrackingCutOffFrequencySet(string GroupName, double CutOffFrequencyZ1, double CutOffFrequencyZ2, double CutOffFrequencyZ3, out string errstring)

##### Python prototype

[errstring] TZTrackingCutOffFrequencySet (GroupName, CutOffFrequencyZ1, CutOffFrequencyZ2, CutOffFrequencyZ3)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) CutOffFrequencyZ1: CutOffFrequencyZ1

(double) CutOffFrequencyZ2: CutOffFrequencyZ2

(double) CutOffFrequencyZ3: CutOffFrequencyZ3

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZTrackingCutOffFrequencySet command which is used to Set cut-off frequency for tracking control. Refer to the XPS Programmer's manual to get the command description.

### TZFocusModeEnable

#### Syntax

##### C# prototype

int TZFocusModeEnable(string GroupName, out string errstring)

##### Python prototype

[errstring] TZFocusModeEnable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZFocusModeEnable command which is used to Enable the focus mode. Refer to the XPS Programmer's manual to get the command description.

### TZFocusModeDisable

#### Syntax

##### C# prototype

int TZFocusModeDisable(string GroupName, out string errstring)

##### Python prototype

[errstring] TZFocusModeDisable (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZFocusModeDisable command which is used to Disable the focus mode. Refer to the XPS Programmer's manual to get the command description.

### TZTrackingUserMaximumZZZTargetDifferenceGet

#### Syntax

##### C# prototype

int TZTrackingUserMaximumZZZTargetDifferenceGet(string GroupName, out double UserMaximumZZZTargetDifference, out string errstring)

##### Python prototype

[UserMaximumZZZTargetDifference, errstring] TZTrackingUserMaximumZZZTargetDifferenceGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) UserMaximumZZZTargetDifference: UserMaximumZZZTargetDifference

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZTrackingUserMaximumZZZTargetDifferenceGet command which is used to Get user maximum ZZZ target difference. Refer to the XPS Programmer's manual to get the command description.

### TZTrackingUserMaximumZZZTargetDifferenceSet

#### Syntax

##### C# prototype

int TZTrackingUserMaximumZZZTargetDifferenceSet(string GroupName, double UserMaximumZZZTargetDifference, out string errstring)

##### Python prototype

[errstring] TZTrackingUserMaximumZZZTargetDifferenceSet (GroupName, UserMaximumZZZTargetDifference)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(double) UserMaximumZZZTargetDifference: UserMaximumZZZTargetDifference

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TZTrackingUserMaximumZZZTargetDifferenceSet command which is used to Set user maximum ZZZ target difference. Refer to the XPS Programmer's manual to get the command description.

### ExternalModuleSocketReserve

#### Syntax

##### C# prototype

int ExternalModuleSocketReserve(Int32 ModuleNumber, out string errstring)

##### Python prototype

[errstring] ExternalModuleSocketReserve (ModuleNumber)

#### Parameters

##### Input parameters

(Int32) ModuleNumber: ModuleNumber

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ExternalModuleSocketReserve command which is used to Reserve socket for external module. Refer to the XPS Programmer's manual to get the command description.

### ExternalModuleSocketFree

#### Syntax

##### C# prototype

int ExternalModuleSocketFree(Int32 ModuleNumber, out string errstring)

##### Python prototype

[errstring] ExternalModuleSocketFree (ModuleNumber)

#### Parameters

##### Input parameters

(Int32) ModuleNumber: ModuleNumber

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ExternalModuleSocketFree command which is used to Free socket reserved for external module. Refer to the XPS Programmer's manual to get the command description.

### ExternalModuleScanFuncTimeDurationsGet

#### Syntax

##### C# prototype

int ExternalModuleScanFuncTimeDurationsGet(Int32 ModuleNumber, out double CurrentCorrectorISRScanDuration, out double MaximumCorrectorISRScanDuration, out double CurrentTZProfilerISRScanDuration, out double MaximumTZProfilerISRScanDuration, out string errstring)

##### Python prototype

[CurrentCorrectorISRScanDuration, MaximumCorrectorISRScanDuration, CurrentTZProfilerISRScanDuration, MaximumTZProfilerISRScanDuration, errstring] ExternalModuleScanFuncTimeDurationsGet (ModuleNumber)

#### Parameters

##### Input parameters

(Int32) ModuleNumber: ModuleNumber

##### Output parameters

(double) CurrentCorrectorISRScanDuration: CurrentCorrectorISRScanDuration

(double) MaximumCorrectorISRScanDuration: MaximumCorrectorISRScanDuration

(double) CurrentTZProfilerISRScanDuration: CurrentTZProfilerISRScanDuration

(double) MaximumTZProfilerISRScanDuration: MaximumTZProfilerISRScanDuration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ExternalModuleScanFuncTimeDurationsGet command which is used to Get external module scan durations. Refer to the XPS Programmer's manual to get the command description.

### ExternalModuleFirmwareVersionGet

#### Syntax

##### C# prototype

int ExternalModuleFirmwareVersionGet(Int32 ModuleNumber, out string Version, out string errstring)

##### Python prototype

[Version, errstring] ExternalModuleFirmwareVersionGet (ModuleNumber)

#### Parameters

##### Input parameters

(Int32) ModuleNumber: ModuleNumber

##### Output parameters

(string) Version: Version

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ExternalModuleFirmwareVersionGet command which is used to Get external module version. Refer to the XPS Programmer's manual to get the command description.

### LoginCheck

#### Syntax

##### C# prototype

int LoginCheck(string Name, string Password, out string errstring)

##### Python prototype

[errstring] LoginCheck (Name, Password)

#### Parameters

##### Input parameters

(string) Name: Name

(string) Password: Password

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous LoginCheck command which is used to Check the Login Parameters. Refer to the XPS Programmer's manual to get the command description.

### LoginSCheck

#### Syntax

##### C# prototype

int LoginSCheck(string Name, string CryptedPassword, out string errstring)

##### Python prototype

[errstring] LoginSCheck (Name, CryptedPassword)

#### Parameters

##### Input parameters

(string) Name: Name

(string) CryptedPassword: CryptedPassword

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous LoginSCheck command which is used to Check the Login Parameters . Refer to the XPS Programmer's manual to get the command description.

### GroupAllPositionTrace

#### Syntax

##### C# prototype

int GroupAllPositionTrace(string GroupName, string TitleTrace, out string errstring)

##### Python prototype

[errstring] GroupAllPositionTrace (GroupName, TitleTrace)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TitleTrace: TitleTrace

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupAllPositionTrace command which is used to Trace all position in TraceAllPositions.log. Refer to the XPS Programmer's manual to get the command description.

### GroupMotorMatrixTrace

#### Syntax

##### C# prototype

int GroupMotorMatrixTrace(string GroupName, string TitleTrace, out string errstring)

##### Python prototype

[errstring] GroupMotorMatrixTrace (GroupName, TitleTrace)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TitleTrace: TitleTrace

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupMotorMatrixTrace command which is used to Trace all position in TraceMotorMatrix.log. Refer to the XPS Programmer's manual to get the command description.

### GroupMotorMatrixInverseTrace

#### Syntax

##### C# prototype

int GroupMotorMatrixInverseTrace(string GroupName, string TitleTrace, out string errstring)

##### Python prototype

[errstring] GroupMotorMatrixInverseTrace (GroupName, TitleTrace)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(string) TitleTrace: TitleTrace

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupMotorMatrixInverseTrace command which is used to Trace all position in TraceMotorMatrixInverse.log. Refer to the XPS Programmer's manual to get the command description.

### GroupPositionCurrentRawGet

#### Syntax

##### C# prototype

int GroupPositionCurrentRawGet(string GroupName, out double[] RawCurrentEncoderPosition, Int32 nbItems, out string errstring)

##### Python prototype

[RawCurrentEncoderPosition, errstring] GroupPositionCurrentRawGet (GroupName, nbItems)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

(Int32) nbItems: nbItems

##### Output parameters

(double[]) RawCurrentEncoderPosition: RawCurrentEncoderPosition

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupPositionCurrentRawGet command which is used to Return raw current positions. Refer to the XPS Programmer's manual to get the command description.

### PositionerMotorOutputOffsetGet

#### Syntax

##### C# prototype

int PositionerMotorOutputOffsetGet(string PositionerName, out double PrimaryDAC1, out double PrimaryDAC2, out double PrimaryDACDifferentialGain, out double SecondaryDAC1, out double SecondaryDAC2, out double SecondaryDACDifferentialGain, out string errstring)

##### Python prototype

[PrimaryDAC1, PrimaryDAC2, PrimaryDACDifferentialGain, SecondaryDAC1, SecondaryDAC2, SecondaryDACDifferentialGain, errstring] PositionerMotorOutputOffsetGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(double) PrimaryDAC1: PrimaryDAC1

(double) PrimaryDAC2: PrimaryDAC2

(double) PrimaryDACDifferentialGain: PrimaryDACDifferentialGain

(double) SecondaryDAC1: SecondaryDAC1

(double) SecondaryDAC2: SecondaryDAC2

(double) SecondaryDACDifferentialGain: SecondaryDACDifferentialGain

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerMotorOutputOffsetGet command which is used to Get soft . Refer to the XPS Programmer's manual to get the command description.

### PositionerMotorOutputOffsetSet

#### Syntax

##### C# prototype

int PositionerMotorOutputOffsetSet(string PositionerName, double PrimaryDAC1, double PrimaryDAC2, double PrimaryDACDifferentialGain, double SecondaryDAC1, double SecondaryDAC2, double SecondaryDACDifferentialGain, out string errstring)

##### Python prototype

[errstring] PositionerMotorOutputOffsetSet (PositionerName, PrimaryDAC1, PrimaryDAC2, PrimaryDACDifferentialGain, SecondaryDAC1, SecondaryDAC2, SecondaryDACDifferentialGain)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

(double) PrimaryDAC1: PrimaryDAC1

(double) PrimaryDAC2: PrimaryDAC2

(double) PrimaryDACDifferentialGain: PrimaryDACDifferentialGain

(double) SecondaryDAC1: SecondaryDAC1

(double) SecondaryDAC2: SecondaryDAC2

(double) SecondaryDACDifferentialGain: SecondaryDACDifferentialGain

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerMotorOutputOffsetSet command which is used to Set soft . Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaPositionRawGet

#### Syntax

##### C# prototype

int SingleAxisThetaPositionRawGet(string GroupName, out double RawEncoderPosition1, out double RawEncoderPosition2, out double RawEncoderPosition3, out string errstring)

##### Python prototype

[RawEncoderPosition1, RawEncoderPosition2, RawEncoderPosition3, errstring] SingleAxisThetaPositionRawGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) RawEncoderPosition1: RawEncoderPosition1

(double) RawEncoderPosition2: RawEncoderPosition2

(double) RawEncoderPosition3: RawEncoderPosition3

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaPositionRawGet command which is used to Get raw encoder positions for single axis theta encoder. Refer to the XPS Programmer's manual to get the command description.

### SingleAxisThetaPositionRawCorrectedGet

#### Syntax

##### C# prototype

int SingleAxisThetaPositionRawCorrectedGet(string GroupName, out double RawCorrectedEncoderPosition1, out double RawCorrectedEncoderPosition2, out double RawCorrectedEncoderPosition3, out string errstring)

##### Python prototype

[RawCorrectedEncoderPosition1, RawCorrectedEncoderPosition2, RawCorrectedEncoderPosition3, errstring] SingleAxisThetaPositionRawCorrectedGet (GroupName)

#### Parameters

##### Input parameters

(string) GroupName: GroupName

##### Output parameters

(double) RawCorrectedEncoderPosition1: RawCorrectedEncoderPosition1

(double) RawCorrectedEncoderPosition2: RawCorrectedEncoderPosition2

(double) RawCorrectedEncoderPosition3: RawCorrectedEncoderPosition3

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SingleAxisThetaPositionRawCorrectedGet command which is used to Get raw corrected encoder positions for single axis theta encoder. Refer to the XPS Programmer's manual to get the command description.

### EEPROMCIESet

#### Syntax

##### C# prototype

int EEPROMCIESet(Int32 CardNumber, string ReferenceString, out string errstring)

##### Python prototype

[errstring] EEPROMCIESet (CardNumber, ReferenceString)

#### Parameters

##### Input parameters

(Int32) CardNumber: CardNumber

(string) ReferenceString: ReferenceString

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EEPROMCIESet command which is used to . Refer to the XPS Programmer's manual to get the command description.

### EEPROMDACOffsetCIESet

#### Syntax

##### C# prototype

int EEPROMDACOffsetCIESet(Int32 PlugNumber, double DAC1Offset, double DAC2Offset, out string errstring)

##### Python prototype

[errstring] EEPROMDACOffsetCIESet (PlugNumber, DAC1Offset, DAC2Offset)

#### Parameters

##### Input parameters

(Int32) PlugNumber: PlugNumber

(double) DAC1Offset: DAC1Offset

(double) DAC2Offset: DAC2Offset

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EEPROMDACOffsetCIESet command which is used to . Refer to the XPS Programmer's manual to get the command description.

### EEPROMDriverSet

#### Syntax

##### C# prototype

int EEPROMDriverSet(Int32 PlugNumber, string ReferenceString, out string errstring)

##### Python prototype

[errstring] EEPROMDriverSet (PlugNumber, ReferenceString)

#### Parameters

##### Input parameters

(Int32) PlugNumber: PlugNumber

(string) ReferenceString: ReferenceString

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EEPROMDriverSet command which is used to . Refer to the XPS Programmer's manual to get the command description.

### EEPROMINTSet

#### Syntax

##### C# prototype

int EEPROMINTSet(Int32 CardNumber, string ReferenceString, out string errstring)

##### Python prototype

[errstring] EEPROMINTSet (CardNumber, ReferenceString)

#### Parameters

##### Input parameters

(Int32) CardNumber: CardNumber

(string) ReferenceString: ReferenceString

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EEPROMINTSet command which is used to . Refer to the XPS Programmer's manual to get the command description.

### CPUCoreAndBoardSupplyVoltagesGet

#### Syntax

##### C# prototype

int CPUCoreAndBoardSupplyVoltagesGet(out double VoltageCPUCore, out double SupplyVoltage1P5V, out double SupplyVoltage3P3V, out double SupplyVoltage5V, out double SupplyVoltage12V, out double SupplyVoltageM12V, out double SupplyVoltageM5V, out double SupplyVoltage5VSB, out string errstring)

##### Python prototype

[VoltageCPUCore, SupplyVoltage1P5V, SupplyVoltage3P3V, SupplyVoltage5V, SupplyVoltage12V, SupplyVoltageM12V, SupplyVoltageM5V, SupplyVoltage5VSB, errstring] CPUCoreAndBoardSupplyVoltagesGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) VoltageCPUCore: VoltageCPUCore

(double) SupplyVoltage1P5V: SupplyVoltage1P5V

(double) SupplyVoltage3P3V: SupplyVoltage3P3V

(double) SupplyVoltage5V: SupplyVoltage5V

(double) SupplyVoltage12V: SupplyVoltage12V

(double) SupplyVoltageM12V: SupplyVoltageM12V

(double) SupplyVoltageM5V: SupplyVoltageM5V

(double) SupplyVoltage5VSB: SupplyVoltage5VSB

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous CPUCoreAndBoardSupplyVoltagesGet command which is used to . Refer to the XPS Programmer's manual to get the command description.

### CPUTemperatureAndFanSpeedGet

#### Syntax

##### C# prototype

int CPUTemperatureAndFanSpeedGet(out double CPUTemperature, out double CPUFanSpeed, out string errstring)

##### Python prototype

[CPUTemperature, CPUFanSpeed, errstring] CPUTemperatureAndFanSpeedGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) CPUTemperature: CPUTemperature

(double) CPUFanSpeed: CPUFanSpeed

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous CPUTemperatureAndFanSpeedGet command which is used to . Refer to the XPS Programmer's manual to get the command description.

### CIEHeaderGet

#### Syntax

##### C# prototype

int CIEHeaderGet(Int32 CIEBoardIndex, out string HeaderString, out string errstring)

##### Python prototype

[HeaderString, errstring] CIEHeaderGet (CIEBoardIndex)

#### Parameters

##### Input parameters

(Int32) CIEBoardIndex: CIEBoardIndex

##### Output parameters

(string) HeaderString: HeaderString

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous CIEHeaderGet command which is used to Return the CIE board header string. Refer to the XPS Programmer's manual to get the command description.

### CIEReset

#### Syntax

##### C# prototype

int CIEReset( out string errstring)

##### Python prototype

[errstring] CIEReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous CIEReset command which is used to Stop and reset all CIE boards. Refer to the XPS Programmer's manual to get the command description.

### ActionListGet

#### Syntax

##### C# prototype

int ActionListGet(out string ActionList, out string errstring)

##### Python prototype

[ActionList, errstring] ActionListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) ActionList: ActionList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ActionListGet command which is used to Action list. Refer to the XPS Programmer's manual to get the command description.

### ActionExtendedListGet

#### Syntax

##### C# prototype

int ActionExtendedListGet(out string ActionList, out string errstring)

##### Python prototype

[ActionList, errstring] ActionExtendedListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) ActionList: ActionList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ActionExtendedListGet command which is used to Action extended list. Refer to the XPS Programmer's manual to get the command description.

### APIExtendedListGet

#### Syntax

##### C# prototype

int APIExtendedListGet(out string Method, out string errstring)

##### Python prototype

[Method, errstring] APIExtendedListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Method: Method

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous APIExtendedListGet command which is used to API method list. Refer to the XPS Programmer's manual to get the command description.

### APIListGet

#### Syntax

##### C# prototype

int APIListGet(out string Method, out string errstring)

##### Python prototype

[Method, errstring] APIListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Method: Method

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous APIListGet command which is used to User API method list without extended API. Refer to the XPS Programmer's manual to get the command description.

### APIListStandardGet

#### Syntax

##### C# prototype

int APIListStandardGet(out string Method, out string errstring)

##### Python prototype

[Method, errstring] APIListStandardGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Method: Method

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous APIListStandardGet command which is used to Standard API method list without extended API. Refer to the XPS Programmer's manual to get the command description.

### APIListAMATGet

#### Syntax

##### C# prototype

int APIListAMATGet(out string Method, out string errstring)

##### Python prototype

[Method, errstring] APIListAMATGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) Method: Method

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous APIListAMATGet command which is used to AMAT API method list without extended API. Refer to the XPS Programmer's manual to get the command description.

### ControllerStatusListGet

#### Syntax

##### C# prototype

int ControllerStatusListGet(out string ControllerStatusList, out string errstring)

##### Python prototype

[ControllerStatusList, errstring] ControllerStatusListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) ControllerStatusList: ControllerStatusList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerStatusListGet command which is used to Controller status list. Refer to the XPS Programmer's manual to get the command description.

### ErrorListGet

#### Syntax

##### C# prototype

int ErrorListGet(out string ErrorsList, out string errstring)

##### Python prototype

[ErrorsList, errstring] ErrorListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) ErrorsList: ErrorsList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ErrorListGet command which is used to Error list. Refer to the XPS Programmer's manual to get the command description.

### EventListGet

#### Syntax

##### C# prototype

int EventListGet(out string EventList, out string errstring)

##### Python prototype

[EventList, errstring] EventListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) EventList: EventList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventListGet command which is used to General event list. Refer to the XPS Programmer's manual to get the command description.

### GatheringListGet

#### Syntax

##### C# prototype

int GatheringListGet(out string list, out string errstring)

##### Python prototype

[list, errstring] GatheringListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) list: list

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringListGet command which is used to Gathering type list. Refer to the XPS Programmer's manual to get the command description.

### GatheringExtendedListGet

#### Syntax

##### C# prototype

int GatheringExtendedListGet(out string list, out string errstring)

##### Python prototype

[list, errstring] GatheringExtendedListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) list: list

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringExtendedListGet command which is used to Gathering type extended list. Refer to the XPS Programmer's manual to get the command description.

### GatheringExternalListGet

#### Syntax

##### C# prototype

int GatheringExternalListGet(out string list, out string errstring)

##### Python prototype

[list, errstring] GatheringExternalListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) list: list

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringExternalListGet command which is used to External Gathering type list. Refer to the XPS Programmer's manual to get the command description.

### GroupStatusListGet

#### Syntax

##### C# prototype

int GroupStatusListGet(out string GroupStatusList, out string errstring)

##### Python prototype

[GroupStatusList, errstring] GroupStatusListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) GroupStatusList: GroupStatusList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GroupStatusListGet command which is used to Group status list. Refer to the XPS Programmer's manual to get the command description.

### HardwareInternalListGet

#### Syntax

##### C# prototype

int HardwareInternalListGet(out string InternalHardwareList, out string errstring)

##### Python prototype

[InternalHardwareList, errstring] HardwareInternalListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) InternalHardwareList: InternalHardwareList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous HardwareInternalListGet command which is used to Internal hardware list. Refer to the XPS Programmer's manual to get the command description.

### ObjectsListGet

#### Syntax

##### C# prototype

int ObjectsListGet(out string ObjectsList, out string errstring)

##### Python prototype

[ObjectsList, errstring] ObjectsListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) ObjectsList: ObjectsList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ObjectsListGet command which is used to Group name and positioner name. Refer to the XPS Programmer's manual to get the command description.

### PositionerErrorListGet

#### Syntax

##### C# prototype

int PositionerErrorListGet(out string PositionerErrorList, out string errstring)

##### Python prototype

[PositionerErrorList, errstring] PositionerErrorListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) PositionerErrorList: PositionerErrorList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerErrorListGet command which is used to Positioner error list. Refer to the XPS Programmer's manual to get the command description.

### PositionerHardwareStatusListGet

#### Syntax

##### C# prototype

int PositionerHardwareStatusListGet(out string PositionerHardwareStatusList, out string errstring)

##### Python prototype

[PositionerHardwareStatusList, errstring] PositionerHardwareStatusListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) PositionerHardwareStatusList: PositionerHardwareStatusList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerHardwareStatusListGet command which is used to Positioner hardware status list. Refer to the XPS Programmer's manual to get the command description.

### PositionerDriverStatusListGet

#### Syntax

##### C# prototype

int PositionerDriverStatusListGet(out string PositionerDriverStatusList, out string errstring)

##### Python prototype

[PositionerDriverStatusList, errstring] PositionerDriverStatusListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) PositionerDriverStatusList: PositionerDriverStatusList

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous PositionerDriverStatusListGet command which is used to Positioner driver status list. Refer to the XPS Programmer's manual to get the command description.

### ReferencingActionListGet

#### Syntax

##### C# prototype

int ReferencingActionListGet(out string list, out string errstring)

##### Python prototype

[list, errstring] ReferencingActionListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) list: list

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ReferencingActionListGet command which is used to Get referencing action list. Refer to the XPS Programmer's manual to get the command description.

### ReferencingSensorListGet

#### Syntax

##### C# prototype

int ReferencingSensorListGet(out string list, out string errstring)

##### Python prototype

[list, errstring] ReferencingSensorListGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) list: list

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ReferencingSensorListGet command which is used to Get referencing sensor list. Refer to the XPS Programmer's manual to get the command description.

### SystemIniParameterGet

#### Syntax

##### C# prototype

int SystemIniParameterGet(string SectionName, string ParameterName, out string ParameterValue, out string errstring)

##### Python prototype

[ParameterValue, errstring] SystemIniParameterGet (SectionName, ParameterName)

#### Parameters

##### Input parameters

(string) SectionName: SectionName

(string) ParameterName: ParameterName

##### Output parameters

(string) ParameterValue: ParameterValue

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SystemIniParameterGet command which is used to Return the system.ini parameter. Refer to the XPS Programmer's manual to get the command description.

### SystemIniParameterSet

#### Syntax

##### C# prototype

int SystemIniParameterSet(string SectionName, string ParameterName, string ParameterValue, out string errstring)

##### Python prototype

[errstring] SystemIniParameterSet (SectionName, ParameterName, ParameterValue)

#### Parameters

##### Input parameters

(string) SectionName: SectionName

(string) ParameterName: ParameterName

(string) ParameterValue: ParameterValue

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SystemIniParameterSet command which is used to Save the system.ini parameter. Refer to the XPS Programmer's manual to get the command description.

### SystemRefParameterGet

#### Syntax

##### C# prototype

int SystemRefParameterGet(string SectionName, string ParameterName, out string ParameterValue, out string errstring)

##### Python prototype

[ParameterValue, errstring] SystemRefParameterGet (SectionName, ParameterName)

#### Parameters

##### Input parameters

(string) SectionName: SectionName

(string) ParameterName: ParameterName

##### Output parameters

(string) ParameterValue: ParameterValue

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SystemRefParameterGet command which is used to Return the system.ref parameter. Refer to the XPS Programmer's manual to get the command description.

### SystemRefParameterSet

#### Syntax

##### C# prototype

int SystemRefParameterSet(string SectionName, string ParameterName, string ParameterValue, out string errstring)

##### Python prototype

[errstring] SystemRefParameterSet (SectionName, ParameterName, ParameterValue)

#### Parameters

##### Input parameters

(string) SectionName: SectionName

(string) ParameterName: ParameterName

(string) ParameterValue: ParameterValue

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SystemRefParameterSet command which is used to Save the system.ref parameter. Refer to the XPS Programmer's manual to get the command description.

### FirmwareRefParameterGet

#### Syntax

##### C# prototype

int FirmwareRefParameterGet(string SectionName, string ParameterName, out string ParameterValue, out string errstring)

##### Python prototype

[ParameterValue, errstring] FirmwareRefParameterGet (SectionName, ParameterName)

#### Parameters

##### Input parameters

(string) SectionName: SectionName

(string) ParameterName: ParameterName

##### Output parameters

(string) ParameterValue: ParameterValue

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous FirmwareRefParameterGet command which is used to Return the system.ref parameter. Refer to the XPS Programmer's manual to get the command description.

### GatheringUserDatasGet

#### Syntax

##### C# prototype

int GatheringUserDatasGet(out double UserData1, out double UserData2, out double UserData3, out double UserData4, out double UserData5, out double UserData6, out double UserData7, out double UserData8, out double UserData9, out double UserData10, out double UserData11, out double UserData12, out double UserData13, out double UserData14, out double UserData15, out double UserData16, out string errstring)

##### Python prototype

[UserData1, UserData2, UserData3, UserData4, UserData5, UserData6, UserData7, UserData8, UserData9, UserData10, UserData11, UserData12, UserData13, UserData14, UserData15, UserData16, errstring] GatheringUserDatasGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) UserData1: UserData1

(double) UserData2: UserData2

(double) UserData3: UserData3

(double) UserData4: UserData4

(double) UserData5: UserData5

(double) UserData6: UserData6

(double) UserData7: UserData7

(double) UserData8: UserData8

(double) UserData9: UserData9

(double) UserData10: UserData10

(double) UserData11: UserData11

(double) UserData12: UserData12

(double) UserData13: UserData13

(double) UserData14: UserData14

(double) UserData15: UserData15

(double) UserData16: UserData16

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringUserDatasGet command which is used to Return UserData values. Refer to the XPS Programmer's manual to get the command description.

### GatheringUserDatasReset

#### Syntax

##### C# prototype

int GatheringUserDatasReset( out string errstring)

##### Python prototype

[errstring] GatheringUserDatasReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous GatheringUserDatasReset command which is used to Reset UserData values. Refer to the XPS Programmer's manual to get the command description.

### SocketsStatusGet

#### Syntax

##### C# prototype

int SocketsStatusGet(out string SocketsStatus, out string errstring)

##### Python prototype

[SocketsStatus, errstring] SocketsStatusGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) SocketsStatus: SocketsStatus

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous SocketsStatusGet command which is used to Get sockets current status. Refer to the XPS Programmer's manual to get the command description.

### TestTCP

#### Syntax

##### C# prototype

int TestTCP(string InputString, out string ReturnString, out string errstring)

##### Python prototype

[ReturnString, errstring] TestTCP (InputString)

#### Parameters

##### Input parameters

(string) InputString: InputString

##### Output parameters

(string) ReturnString: ReturnString

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous TestTCP command which is used to Test TCP/IP transfert. Refer to the XPS Programmer's manual to get the command description.

### OptionalModuleExecute

#### Syntax

##### C# prototype

int OptionalModuleExecute(string ModuleFileName, out string errstring)

##### Python prototype

[errstring] OptionalModuleExecute (ModuleFileName)

#### Parameters

##### Input parameters

(string) ModuleFileName: ModuleFileName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous OptionalModuleExecute command which is used to Execute an optional module. Refer to the XPS Programmer's manual to get the command description.

### OptionalModuleKill

#### Syntax

##### C# prototype

int OptionalModuleKill(string TaskName, out string errstring)

##### Python prototype

[errstring] OptionalModuleKill (TaskName)

#### Parameters

##### Input parameters

(string) TaskName: TaskName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous OptionalModuleKill command which is used to Kill an optional module. Refer to the XPS Programmer's manual to get the command description.

### DRV11StatusGet

#### Syntax

##### C# prototype

int DRV11StatusGet(string PositionerName, out UInt16 DriverStatusByte1, out UInt16 DriverStatusByte2, out string errstring)

##### Python prototype

[DriverStatusByte1, DriverStatusByte2, errstring] DRV11StatusGet (PositionerName)

#### Parameters

##### Input parameters

(string) PositionerName: PositionerName

##### Output parameters

(UInt16) DriverStatusByte1: DriverStatusByte1

(UInt16) DriverStatusByte2: DriverStatusByte2

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DRV11StatusGet command which is used to Get driver status bytes. Refer to the XPS Programmer's manual to get the command description.

### DebugTraceCommunicationReset

#### Syntax

##### C# prototype

int DebugTraceCommunicationReset( out string errstring)

##### Python prototype

[errstring] DebugTraceCommunicationReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugTraceCommunicationReset command which is used to Reset rolling buffer. Refer to the XPS Programmer's manual to get the command description.

### DebugTraceCommunicationSave

#### Syntax

##### C# prototype

int DebugTraceCommunicationSave( out string errstring)

##### Python prototype

[errstring] DebugTraceCommunicationSave ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugTraceCommunicationSave command which is used to Save rolling buffer. Refer to the XPS Programmer's manual to get the command description.

### RunTraceloggerProcessWithTimeSetting

#### Syntax

##### C# prototype

int RunTraceloggerProcessWithTimeSetting(Int32 TraceloggerTime, out string errstring)

##### Python prototype

[errstring] RunTraceloggerProcessWithTimeSetting (TraceloggerTime)

#### Parameters

##### Input parameters

(Int32) TraceloggerTime: TraceloggerTime

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous RunTraceloggerProcessWithTimeSetting command which is used to Run Tracelogger Process With Time Setting. Refer to the XPS Programmer's manual to get the command description.

### RunTraceloggerProcessWithRollingBuffer

#### Syntax

##### C# prototype

int RunTraceloggerProcessWithRollingBuffer( out string errstring)

##### Python prototype

[errstring] RunTraceloggerProcessWithRollingBuffer ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous RunTraceloggerProcessWithRollingBuffer command which is used to Run Tracelogger Process With Rolling Buffer. Refer to the XPS Programmer's manual to get the command description.

### CreateQNXEvent

#### Syntax

##### C# prototype

int CreateQNXEvent(Int32 EventNumber, string EventName, out string errstring)

##### Python prototype

[errstring] CreateQNXEvent (EventNumber, EventName)

#### Parameters

##### Input parameters

(Int32) EventNumber: EventNumber

(string) EventName: EventName

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous CreateQNXEvent command which is used to Run Create Event. Refer to the XPS Programmer's manual to get the command description.

### StartEventsAcqusition

#### Syntax

##### C# prototype

int StartEventsAcqusition( out string errstring)

##### Python prototype

[errstring] StartEventsAcqusition ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous StartEventsAcqusition command which is used to Start Events Acqusition. Refer to the XPS Programmer's manual to get the command description.

### StopEventsAcqusition

#### Syntax

##### C# prototype

int StopEventsAcqusition( out string errstring)

##### Python prototype

[errstring] StopEventsAcqusition ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous StopEventsAcqusition command which is used to Stop Events Acqusition. Refer to the XPS Programmer's manual to get the command description.

### EventTriggerSet

#### Syntax

##### C# prototype

int EventTriggerSet( out string errstring)

##### Python prototype

[errstring] EventTriggerSet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous EventTriggerSet command which is used to Generate internal event. Refer to the XPS Programmer's manual to get the command description.

### DebugISRReset

#### Syntax

##### C# prototype

int DebugISRReset( out string errstring)

##### Python prototype

[errstring] DebugISRReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugISRReset command which is used to Reset ISR load ratios and usage times. Refer to the XPS Programmer's manual to get the command description.

### DebugISRCorrectorLoadRatioGet

#### Syntax

##### C# prototype

int DebugISRCorrectorLoadRatioGet(out double ISRCorrectorLoadRatio, out double ISRCorrectorLoadRatioMin, out double ISRCorrectorLoadRatioMax, out string errstring)

##### Python prototype

[ISRCorrectorLoadRatio, ISRCorrectorLoadRatioMin, ISRCorrectorLoadRatioMax, errstring] DebugISRCorrectorLoadRatioGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) ISRCorrectorLoadRatio: ISRCorrectorLoadRatio

(double) ISRCorrectorLoadRatioMin: ISRCorrectorLoadRatioMin

(double) ISRCorrectorLoadRatioMax: ISRCorrectorLoadRatioMax

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugISRCorrectorLoadRatioGet command which is used to Get Corrector load ratio. Refer to the XPS Programmer's manual to get the command description.

### DebugISRProfilerLoadRatioGet

#### Syntax

##### C# prototype

int DebugISRProfilerLoadRatioGet(out double ISRProfilerLoadRatio, out double ISRProfilerLoadRatioMin, out double ISRProfilerLoadRatioMax, out string errstring)

##### Python prototype

[ISRProfilerLoadRatio, ISRProfilerLoadRatioMin, ISRProfilerLoadRatioMax, errstring] DebugISRProfilerLoadRatioGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) ISRProfilerLoadRatio: ISRProfilerLoadRatio

(double) ISRProfilerLoadRatioMin: ISRProfilerLoadRatioMin

(double) ISRProfilerLoadRatioMax: ISRProfilerLoadRatioMax

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugISRProfilerLoadRatioGet command which is used to Get Profiler load ratio. Refer to the XPS Programmer's manual to get the command description.

### DebugISRServitudesLoadRatioGet

#### Syntax

##### C# prototype

int DebugISRServitudesLoadRatioGet(out double ISRServitudesLoadRatio, out double ISRServitudesLoadRatioMin, out double ISRServitudesLoadRatioMax, out string errstring)

##### Python prototype

[ISRServitudesLoadRatio, ISRServitudesLoadRatioMin, ISRServitudesLoadRatioMax, errstring] DebugISRServitudesLoadRatioGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) ISRServitudesLoadRatio: ISRServitudesLoadRatio

(double) ISRServitudesLoadRatioMin: ISRServitudesLoadRatioMin

(double) ISRServitudesLoadRatioMax: ISRServitudesLoadRatioMax

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugISRServitudesLoadRatioGet command which is used to Get Servitudes load ratio. Refer to the XPS Programmer's manual to get the command description.

### DebugISRCorrectorUsageGet

#### Syntax

##### C# prototype

int DebugISRCorrectorUsageGet(out double ISRCorrectorUsageCurrent, out double ISRCorrectorPeriodUsageCurrent, out double ISRCorrectorUsageMin, out double ISRCorrectorPeriodUsageMin, out double ISRCorrectorUsageMax, out double ISRCorrectorPeriodUsageMax, out string errstring)

##### Python prototype

[ISRCorrectorUsageCurrent, ISRCorrectorPeriodUsageCurrent, ISRCorrectorUsageMin, ISRCorrectorPeriodUsageMin, ISRCorrectorUsageMax, ISRCorrectorPeriodUsageMax, errstring] DebugISRCorrectorUsageGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) ISRCorrectorUsageCurrent: ISRCorrectorUsageCurrent

(double) ISRCorrectorPeriodUsageCurrent: ISRCorrectorPeriodUsageCurrent

(double) ISRCorrectorUsageMin: ISRCorrectorUsageMin

(double) ISRCorrectorPeriodUsageMin: ISRCorrectorPeriodUsageMin

(double) ISRCorrectorUsageMax: ISRCorrectorUsageMax

(double) ISRCorrectorPeriodUsageMax: ISRCorrectorPeriodUsageMax

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugISRCorrectorUsageGet command which is used to Get ISR Corrector time usage and period. Refer to the XPS Programmer's manual to get the command description.

### DebugISRProfilerUsageGet

#### Syntax

##### C# prototype

int DebugISRProfilerUsageGet(out double ISRProfilerUsageCurrent, out double ISRProfilerPeriodUsageCurrent, out double ISRProfilerUsageMin, out double ISRProfilerPeriodUsageMin, out double ISRProfilerUsageMax, out double ISRProfilerPeriodUsageMax, out string errstring)

##### Python prototype

[ISRProfilerUsageCurrent, ISRProfilerPeriodUsageCurrent, ISRProfilerUsageMin, ISRProfilerPeriodUsageMin, ISRProfilerUsageMax, ISRProfilerPeriodUsageMax, errstring] DebugISRProfilerUsageGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) ISRProfilerUsageCurrent: ISRProfilerUsageCurrent

(double) ISRProfilerPeriodUsageCurrent: ISRProfilerPeriodUsageCurrent

(double) ISRProfilerUsageMin: ISRProfilerUsageMin

(double) ISRProfilerPeriodUsageMin: ISRProfilerPeriodUsageMin

(double) ISRProfilerUsageMax: ISRProfilerUsageMax

(double) ISRProfilerPeriodUsageMax: ISRProfilerPeriodUsageMax

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugISRProfilerUsageGet command which is used to Get ISR Profiler time usage and period. Refer to the XPS Programmer's manual to get the command description.

### DebugISRServitudesUsageGet

#### Syntax

##### C# prototype

int DebugISRServitudesUsageGet(out double ISRServitudesUsageCurrent, out double ISRServitudesPeriodUsageCurrent, out double ISRServitudesUsageMin, out double ISRServitudesPeriodUsageMin, out double ISRServitudesUsageMax, out double ISRServitudesPeriodUsageMax, out string errstring)

##### Python prototype

[ISRServitudesUsageCurrent, ISRServitudesPeriodUsageCurrent, ISRServitudesUsageMin, ISRServitudesPeriodUsageMin, ISRServitudesUsageMax, ISRServitudesPeriodUsageMax, errstring] DebugISRServitudesUsageGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) ISRServitudesUsageCurrent: ISRServitudesUsageCurrent

(double) ISRServitudesPeriodUsageCurrent: ISRServitudesPeriodUsageCurrent

(double) ISRServitudesUsageMin: ISRServitudesUsageMin

(double) ISRServitudesPeriodUsageMin: ISRServitudesPeriodUsageMin

(double) ISRServitudesUsageMax: ISRServitudesUsageMax

(double) ISRServitudesPeriodUsageMax: ISRServitudesPeriodUsageMax

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugISRServitudesUsageGet command which is used to Get ISR Servitudes time usage and period. Refer to the XPS Programmer's manual to get the command description.

### DebugCorrectorTimeUsageGet

#### Syntax

##### C# prototype

int DebugCorrectorTimeUsageGet(out double ISRCorrectorStartTime, out double PreviousISRCorrectorPeriod, out double ISRInitParam0Duration, out double ISRInitParam1Duration, out double ISRTimerDuration, out double ISRGPIODuration, out double ISRGroupsDuration, out double ISREventDuration, out double ISRGeneralInhibDuration, out double ISRGatheringDuration, out double ISRInitParam2Duration, out string errstring)

##### Python prototype

[ISRCorrectorStartTime, PreviousISRCorrectorPeriod, ISRInitParam0Duration, ISRInitParam1Duration, ISRTimerDuration, ISRGPIODuration, ISRGroupsDuration, ISREventDuration, ISRGeneralInhibDuration, ISRGatheringDuration, ISRInitParam2Duration, errstring] DebugCorrectorTimeUsageGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) ISRCorrectorStartTime: ISRCorrectorStartTime

(double) PreviousISRCorrectorPeriod: PreviousISRCorrectorPeriod

(double) ISRInitParam0Duration: ISRInitParam0Duration

(double) ISRInitParam1Duration: ISRInitParam1Duration

(double) ISRTimerDuration: ISRTimerDuration

(double) ISRGPIODuration: ISRGPIODuration

(double) ISRGroupsDuration: ISRGroupsDuration

(double) ISREventDuration: ISREventDuration

(double) ISRGeneralInhibDuration: ISRGeneralInhibDuration

(double) ISRGatheringDuration: ISRGatheringDuration

(double) ISRInitParam2Duration: ISRInitParam2Duration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugCorrectorTimeUsageGet command which is used to Get Corrector segmentation durations. Refer to the XPS Programmer's manual to get the command description.

### DebugProfilerTimeUsageGet

#### Syntax

##### C# prototype

int DebugProfilerTimeUsageGet(out double ISRCorrectProfilDelta, out double ISRGroupsDuration, out double ISRInitParamDuration, out string errstring)

##### Python prototype

[ISRCorrectProfilDelta, ISRGroupsDuration, ISRInitParamDuration, errstring] DebugProfilerTimeUsageGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) ISRCorrectProfilDelta: ISRCorrectProfilDelta

(double) ISRGroupsDuration: ISRGroupsDuration

(double) ISRInitParamDuration: ISRInitParamDuration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugProfilerTimeUsageGet command which is used to Get profiler segmentation durations. Refer to the XPS Programmer's manual to get the command description.

### DebugServitudesTimeUsageGet

#### Syntax

##### C# prototype

int DebugServitudesTimeUsageGet(out double ISRProfilServDelta, out double ISRErrorCheckDuration, out double ISRGroupsDuration, out double ISRInitParamDuration, out string errstring)

##### Python prototype

[ISRProfilServDelta, ISRErrorCheckDuration, ISRGroupsDuration, ISRInitParamDuration, errstring] DebugServitudesTimeUsageGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) ISRProfilServDelta: ISRProfilServDelta

(double) ISRErrorCheckDuration: ISRErrorCheckDuration

(double) ISRGroupsDuration: ISRGroupsDuration

(double) ISRInitParamDuration: ISRInitParamDuration

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous DebugServitudesTimeUsageGet command which is used to Get Servitudes segmentation durations. Refer to the XPS Programmer's manual to get the command description.

### ControllerMotionKernelMinMaxTimeLoadGet

#### Syntax

##### C# prototype

int ControllerMotionKernelMinMaxTimeLoadGet(out double MinimumCPUTotalLoadRatio, out double MaximumCPUTotalLoadRatio, out double MinimumCPUCorrectorLoadRatio, out double MaximumCPUCorrectorLoadRatio, out double MinimumCPUProfilerLoadRatio, out double MaximumCPUProfilerLoadRatio, out double MinimumCPUServitudesLoadRatio, out double MaximumCPUServitudesLoadRatio, out string errstring)

##### Python prototype

[MinimumCPUTotalLoadRatio, MaximumCPUTotalLoadRatio, MinimumCPUCorrectorLoadRatio, MaximumCPUCorrectorLoadRatio, MinimumCPUProfilerLoadRatio, MaximumCPUProfilerLoadRatio, MinimumCPUServitudesLoadRatio, MaximumCPUServitudesLoadRatio, errstring] ControllerMotionKernelMinMaxTimeLoadGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) MinimumCPUTotalLoadRatio: MinimumCPUTotalLoadRatio

(double) MaximumCPUTotalLoadRatio: MaximumCPUTotalLoadRatio

(double) MinimumCPUCorrectorLoadRatio: MinimumCPUCorrectorLoadRatio

(double) MaximumCPUCorrectorLoadRatio: MaximumCPUCorrectorLoadRatio

(double) MinimumCPUProfilerLoadRatio: MinimumCPUProfilerLoadRatio

(double) MaximumCPUProfilerLoadRatio: MaximumCPUProfilerLoadRatio

(double) MinimumCPUServitudesLoadRatio: MinimumCPUServitudesLoadRatio

(double) MaximumCPUServitudesLoadRatio: MaximumCPUServitudesLoadRatio

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerMotionKernelMinMaxTimeLoadGet command which is used to Get controller motion kernel minimum and maximum time load. Refer to the XPS Programmer's manual to get the command description.

### ControllerMotionKernelMinMaxTimeLoadReset

#### Syntax

##### C# prototype

int ControllerMotionKernelMinMaxTimeLoadReset( out string errstring)

##### Python prototype

[errstring] ControllerMotionKernelMinMaxTimeLoadReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerMotionKernelMinMaxTimeLoadReset command which is used to Reset controller motion kernel min/max time load. Refer to the XPS Programmer's manual to get the command description.

### ControllerMotionKernelPeriodMinMaxGet

#### Syntax

##### C# prototype

int ControllerMotionKernelPeriodMinMaxGet(out double MinimumCorrectorPeriod, out double MaximumCorrectorPeriod, out double MinimumProfilerPeriod, out double MaximumProfilerPeriod, out double MinimumServitudesPeriod, out double MaximumServitudesPeriod, out string errstring)

##### Python prototype

[MinimumCorrectorPeriod, MaximumCorrectorPeriod, MinimumProfilerPeriod, MaximumProfilerPeriod, MinimumServitudesPeriod, MaximumServitudesPeriod, errstring] ControllerMotionKernelPeriodMinMaxGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(double) MinimumCorrectorPeriod: MinimumCorrectorPeriod

(double) MaximumCorrectorPeriod: MaximumCorrectorPeriod

(double) MinimumProfilerPeriod: MinimumProfilerPeriod

(double) MaximumProfilerPeriod: MaximumProfilerPeriod

(double) MinimumServitudesPeriod: MinimumServitudesPeriod

(double) MaximumServitudesPeriod: MaximumServitudesPeriod

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerMotionKernelPeriodMinMaxGet command which is used to Get controller motion kernel min/max periods. Refer to the XPS Programmer's manual to get the command description.

### ControllerMotionKernelPeriodMinMaxReset

#### Syntax

##### C# prototype

int ControllerMotionKernelPeriodMinMaxReset( out string errstring)

##### Python prototype

[errstring] ControllerMotionKernelPeriodMinMaxReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ControllerMotionKernelPeriodMinMaxReset command which is used to Reset controller motion kernel min/max periods. Refer to the XPS Programmer's manual to get the command description.

### ISRCorrectorCompensateOverrunNumberGet

#### Syntax

##### C# prototype

int ISRCorrectorCompensateOverrunNumberGet(out Int32 CorrectorOverrunCompensationNumber, out Int32 CorrectorOverrunCompensationMissNumber, out string errstring)

##### Python prototype

[CorrectorOverrunCompensationNumber, CorrectorOverrunCompensationMissNumber, errstring] ISRCorrectorCompensateOverrunNumberGet ()

#### Parameters

##### Input parameters

None

##### Output parameters

(Int32\_i) CorrectorOverrunCompensationNumber: CorrectorOverrunCompensationNumber

(Int32\_i) CorrectorOverrunCompensationMissNumber: CorrectorOverrunCompensationMissNumber

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ISRCorrectorCompensateOverrunNumberGet command which is used to Get ISR Corrector Compensate Overrun Number. Refer to the XPS Programmer's manual to get the command description.

### ISRCorrectorCompensateOverrunNumberReset

#### Syntax

##### C# prototype

int ISRCorrectorCompensateOverrunNumberReset( out string errstring)

##### Python prototype

[errstring] ISRCorrectorCompensateOverrunNumberReset ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous ISRCorrectorCompensateOverrunNumberReset command which is used to Reset ISR Corrector Compensate Overrun Number. Refer to the XPS Programmer's manual to get the command description.

### RunQconn

#### Syntax

##### C# prototype

int RunQconn( out string errstring)

##### Python prototype

[errstring] RunQconn ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous RunQconn command which is used to Run qconn service. Refer to the XPS Programmer's manual to get the command description.

### Crash

#### Syntax

##### C# prototype

int Crash( out string errstring)

##### Python prototype

[errstring] Crash ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous Crash command which is used to Crash controller. Refer to the XPS Programmer's manual to get the command description.

### RunPidin

#### Syntax

##### C# prototype

int RunPidin( out string errstring)

##### Python prototype

[errstring] RunPidin ()

#### Parameters

##### Input parameters

None

##### Output parameters

(string) errString: The failure reason

##### Return

(int) error code: 0 in success and -1 on failure

#### Description

This function is used to process synchrounous RunPidin command which is used to Save pidin result in a Pidin.log file. Refer to the XPS Programmer's manual to get the command description.