2020 2 0 SIwave 2

oApp(20)

CloseProject(string projname)

CloseProjectNoForce(string projname)

GetActiveProject() -> IDispatch

GetAppDesktop() -> IDispatch

GetExtractorDesktop() -> string

GetProjectDirectory() -> string

GetProjectList() -> Structured Array

GetVersion() -> string

ImportAnfFile(string fileName) -> IDispatch

ImportOdb(string odbBstr, string xmlBstr) -> IDispatch

IsInteractiveDesktop() -> int

OpenProject(string itemPath) -> IDispatch

PauseRecording()

Quit()

ReleaseDesktopPtr(string desktop)

RestoreWindow()

ResumeRecording()

SetActiveProject(string projname) -> IDispatch

SupportSParamLink() -> int

TpaComputeRLC(string dummy) -> IDispatch

oProject(437)

GetActiveDesign() -> IDispatch

GetConfigurableData(string type) -> string

GetData(string linkType, string configStr, [string msg /*optional*/]) -> string

GetFileDir() -> string

GetFilePath() -> string

GetModule(string moduleName) -> IDispatch

GetName() -> string

GetNetworkDataSolution(string solnName) -> string

GetNetworkDataSolutionDefinition(string solnName) -> Structured Array

GetTopDesignList() -> Structured Array

IsSolutionDataAvailable(string solnName) -> int

Save(

ScrActivateCktElem(string elemName, string elemType, int activate) -> int

ScrAddEquipotentialRegion(string partName, string refDes, string pinName, int regionOnTop) -> int

ScrAddError(string msg)

ScrAddInfo(string msg)

ScrAddLayer(string layerName, string refLayerName, int toAbove, int type, double thickness, string layerMaterialName)

 $Scr Add Material (string\ mat Type,\ string\ mat Name,\ double\ eps Or Sigma,\ double\ lt Or Perm) \rightarrow short$

ScrAddOneLayerPadstack(string padstackName, string layerName, string shape, string width, string height) -> int

 $Scr Add Stackup Layer (string\ layer Name,\ string\ ref Layer Name,\ int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\ layer Material Name) -> int\ to Above,\ int\ type,\ string\ thickness,\ string\$

ScrAddWarning(string msg)

ScrAppendSteppedSweep(string sweepType, double minFreq, double maxFreq, double stepSize) -> int

ScrAppendSweep(string sweepType, double minFreq, double maxFreq, int numPts, int isLog) -> int

ScrAssign4PtBondwireProfile(string layerName, double h1, double h2, double radius, string supportLayerName, string terminationLayerName) -> int

ScrAssign5PtBondwireProfile(string layerName, double h1, double h2, double radius, double alpha, double beta, string supportLayerName, string terminationLayerName) -> int

 $Scr Assign Bondwire Terminal Type (string\ net Name Reg Exp,\ string\ reference Desig Reg Exp,\ string\ pin Name Reg Exp,\ int\ is Sink) -> int$

ScrAssignComplexSolderballProfile(string padstackName, double height, double radius, double midRadius, double frustumHeight, int placement, int terminalType) -> int

ScrAssignLowBondwireProfile(string layerName, double h1, double h2, double radius, double alpha, double beta, string supportLayerName, string terminationLayerName) -> int

ScrAssignSimpleSolderballProfile(string padstackName, double height, double radius, int placement, int terminalType) -> int

 $Scr Assign Sketched Bondwire Profile (string\ layer Name,\ string\ file Path,\ double\ radius,\ string\ support Layer Name,\ string\ termination Layer Name) \ ->\ int$

ScrAssignSketchedBondwireProfileFromArray(string layerName, string units, Structured Array bwPoints, double radius, string supportLayerName, string terminationLayerName) -> int

ScrAssignSolderballTerminalType(string netNameRegExp, string referenceDesigRegExp, string pinNameRegExp, int isSink) -> int

ScrBooleanUnite(Structured Array netNameList) -> int

ScrChangePartType(string partName, string newtype) -> int

ScrCleanUpOverlappingtraces(Structured Array layerNameList) -> int

ScrClearAllSweeps(string sweepType) -> int

ScrClipDesign(Structured Array netNames, Structured Array points) -> int

ScrClipDesignAroundNets(Structured Array netNames, string clipExtentDist, int simplifiedExtent, int traceCuttingOption, int ignoreLayerVis, int reverseCutting) -> int

ScrCloseProject()

ScrCloseProjectNoSave()

ScrComputeFwsSubckt(string syzSimName, string bstrpath) -> short

ScrComputeFwsSubcktForNamedSim(string simType, string simName, string bstrpath) -> short

ScrConvertPlanesToTraces(Structured Array netNameList) -> int

ScrConvertTracesToPlanes(string layerName, string netName, int merge, double minArea, string unitName) -> int

ScrConvertTracesToPlanesByNet(Structured Array netNameList) -> int

ScrCopyImageToClipBoard()

ScrCorrectValChkErrorsWarnings(Structured Array fixOptionArray) -> short

ScrCreatePinGroupByDist(string partName, string refDes, string pinName, string groupName, string maxDistance, int selectFromAllNets) -> int

ScrCreatePinGroupByNet(string partName, string refDes, string netName, string groupName, int applyToAllComponents) -> int

ScrCreatePinGroups(string partName, string refDes, Structured Array pinNames, string groupName, int applyToAllComponents) -> int

ScrCreatePinGroupsByGrid(string partName, string refDes, int numRows, int numCols, int applyPerNet, int applyToAllComponents) -> int

ScrCreatePortsOnPart(string partName, string refDes, string posNet, Structured Array posPinList, string refNet, string impedance) -> int

ScrDeleteAllNets()

ScrDeleteCktElem(string refDes) -> int

ScrDeleteDcSolution()

ScrDeleteFrequencySweepSolution()

ScrDeleteLayer(string layerNameBstr) -> int

ScrDeleteNearFieldSolutions()

ScrDeleteNet(string netName) -> int

ScrDeleteNets(Structured Array netNames)

ScrDeleteNetsGivenInFile(string fileName)

ScrDeletePadstack(string padstackName) -> int

ScrDeletePinGroup(string pinGroupName, int deleteRefCktElems) -> int

ScrDeleteResonantModeSolution()

ScrDeleteSpiceSubcktSolution()

ScrDeleteSyzParameterSolution()

ScrDrawAutoPlaneExtents(int simplified, string dist) -> int

ScrDrawCapacitor(string capName, string partNameBstr, double px, double px, double nx, double nx, string posLayerName, string negLayerName, double capVal, double seriesIndVal, double seriesResVal) -> short

ScrDrawCircle(double ctrX, double ctrY, double radius, string layerName, string netName, string unitsBstr) -> short

ScrDrawCurrentSource(string sourceName, string partNameBstr, double px, double px, double nx, double nx, string posLayerName, string negLayerName, double mag, double phase, double parallelRes) -> short

ScrDrawInductor(string indName, string partNameBstr, double px, double px, double nx, double nx, string posLayerName, string negLayerName, double indVal) -> short

ScrDrawPolygon(Structured Array points, string layerName, string netName, string unitsBstr) -> short

ScrDrawPort(string portName, double px, double px, double nx, string posLayerName, string negLayerName, double refZRe) -> short

ScrDrawRectangle(double x1, double y1, double x2, double y2, string layerName, string netName, string unitsBstr) -> short

ScrDrawResistor(string resName, string partNameBstr, double px, double px, double nx, double nx, string posLayerName, string negLayerName, double resVal) -> short

ScrDrawTrace(Structured Array points, double width, string layerName, string netName, string unitsBstr) -> short

ScrDrawVia(double ctrX, double ctrY, string topLayerName, string botLayerName, string padstackName, string netName, double offsetX, double offsetY, double rotAngle, string unitsBstr) -> short

ScrDrawVoltageProbe(string probeName, double px, double py, double ny, string posLayerName, string negLayerName) -> short

ScrDrawVoltageSource(string sourceName, string partNameBstr, double px, double px, double nx, double nx, string posLayerName, string negLayerName, double mag, double phase, double seriesRes) -> short

ScrEditCktElemName(string name, string type, string newName) -> int

ScrEditLayerName(string layerName, string newLayerName)

ScrEditMaterial(string matType, string matName, double epsOrSigma, double ltOrPerm) -> short

ScrEditNetName(string netName, string newNetName)

ScrEditPadStackName(string oldPadstackName, string newPadstackName) -> int

 $ScrEnable Cavity Field Coupling (int\ flag)$

ScrEnableCoPlaneCoupling(int flag)

ScrEnableErcSimSetup(int flag)

ScrEnableExcludeNonFuncPads(int flag)

ScrEnableFwsRelativeErrorTol(int enableIt)

ScrEnableIntraPlaneCoupling(int flag)

ScrEnableSplitPlaneCoupling(int flag)

ScrEnableTraceCoupling(int flag)

ScrExport3DModel(string exportTypeName, string outFilePath) -> int

ScrExportAEDT(string aedtBstr, int useAutoNetSelect) -> int

ScrExportAnf(string anfBstr) -> int

ScrExportComponentFile(string cmpBstr) -> int

ScrExportCpaSimReport(string bCpaSimName, string bReportPath) -> short

ScrExportDcPowerDataToIcepak(int exportPowerData)

 $ScrExportDcPowerTree (string\ bSimName,\ string\ bThresholdSpecCsvFilePath,\ string\ bOutputImagePath) -> short$

ScrExportDcSimReport(string bSimName, string bImgBackgroundColor, string bReportPath) -> short

ScrExportDcSimReportColorBarProperties(int numDiv, int numDigit, int bFlipColorScale, int bWhiteBeyondMinMax) -> short

 $ScrExportDcSimReportOptions (int\ bShowDevices,\ string\ filtersXMLFileName) -> short$

ScrExportDcSimReportScaling(string layerName, string plotType, double minVal, double maxVal, int bLogScale) -> short

ScrExportDcSimReportUnits(string curDenUnits, string vltUnits, string pwrDenUnits) -> short

ScrExportEDB(string edbBstr) -> int

ScrExportElementData(string simName, string fileName, string tabTitle) -> int

ScrExportIcepakProject(string projectPath, string dcSimName) -> short

ScrExportIcepakSimReport(string bSimName, string bReportPath) -> short

ScrExportIcepakSimReportColorBarProperties(int numDiv, int numDigit, int bFlipColorScale, int bWhiteBeyondMinMax) -> short

ScrExportIcepakSimReportScaling(double minVal, double maxVal, int bLogScale) -> short

ScrExportIcepakSimReportUnits(string tempUnits) -> short

ScrExportInfoWarningErrorTree(string fileName) -> int

ScrExportLayerStackup(string fileName)

ScrExportNamedSimToTouchstone(string simType, string simName, string bstrpath) -> short

ScrExportNearFieldAllMaxFieldFaceDataToCSV(string simName, string fileName) -> int

ScrExportNearFieldFaceDataToCSV(string simName, string fileName) -> int

ScrExportNearFieldMaxFaceDataToCSV(string simName, string fileName) -> int

 $ScrExportNetDelayReport(string\ bReportPath,\ string\ netNameRegExp,\ string\ lengthUnits,\ string\ delayUnits,\ int\ bOnlyDieToBall) -> shortNetDelayReport(string\ bReportPath,\ string\ netNameRegExp,\ string\ lengthUnits,\ string\ delayUnits,\ int\ bOnlyDieToBall) -> shortNetDelayReport(string\ bReportPath,\ string\ netNameRegExp,\ string\ lengthUnits,\ string\ delayUnits,\ int\ bOnlyDieToBall) -> shortNetDelayReport(string\ bReportPath,\ string\ netNameRegExp,\ string\ lengthUnits,\ string\ delayUnits,\ int\ bOnlyDieToBall) -> shortNetDelayReport(string\ bReportPath,\ string\ netNameRegExp,\ string\ lengthUnits,\ string\ netNameRegExp,\ netNameRegExp,\ netNameRegExp,\ netNameRegExp,\ netNameRegExp,\ netNameRegExp,\ netNameRegExp,\ netNameRegExp,\ netN$

ScrExportSettingsFile(string sefBstr) -> int

ScrExportSettingsFileSetOptions(Structured Array optionArray) -> int

ScrExportSpiceSubcktFromSParamSim(string bSimType, string bSimName, string bSpiceFormat, int numLumps, string bOutputSpiceSubcktFilePath, Structured

ScrExportSyzSimToTouchstone(string syzSimName, string bstrpath) -> short

ScrExportToTouchstone(string bstrpath) -> short

ScrExportVprobeData(string acSimName, string bstrpath) -> short

ScrExportXfl(string xflBstr) -> int

ScrExportZ0ScanReport(string bSimName, string bReportPath) -> int

ScrExportZ0ScanReportColorBarProperties(int numDiv, int numDigit, int bFlipColorScale, int bWhiteBeyondMinMax) -> short

ScrExportZ0ScanReportScaling(double minVal, double maxVal, int bLogScale) -> short

ScrFitAll()

ScrFitSelection()

ScrFwsEnforceCausality(int enforce)

ScrGenerateConnectionReport(string fileName) -> int

ScrGenerateFarFieldReport(string simulationName, int plotType) -> int

ScrGeneratelCDieNetwork(string icPartName, string refDes, string net, string networkName, string resVal, int useStarPattern, string capVal, string esr, string toNet, int useAutoRadius, string resRadius, string capRadius) -> int

ScrGenerateSyzReport(string simulationName, int plotType, int plotSubType) -> int

ScrGenerateVoltageProbeReport(string simulationName, int plotType) -> int

ScrGet2PortSYZData(string paramType, string simName, string port1Name, string port2Name, Structured Array freqData, Structured Array syzMag, Structured Array syzPhase) -> int

ScrGetActiveComponentList(string compType) -> Structured Array

ScrGetBondwireProfilesProperty() -> Structured Array

ScrGetBondwiresOfBwModel(string bwModelName) -> Structured Array

ScrGetBwModelNameList() -> Structured Array

ScrGetCktElemTerminalNetNames(string name, string type, Structured Array pnet, Structured Array nnet) -> int

ScrGetComponentList(string compType) -> Structured Array

ScrGetDcConnectedNets(Structured Array netNameList, Structured Array nets, Structured Array cktElems) -> int

 $ScrGetDcThermalDataDir(string\ simName,\ Structured\ Array\ thermalDataDirBstr) -> int$

ScrGetDesignBoundingBox(string units, Structured Array designBBox) -> int

 $ScrGetDieLayerName(string\ dieName) -> string$

ScrGetDieNameList() -> Structured Array

ScrGetLayerMaterial(string layerNameBstr) -> string

ScrGetLayerNameList() -> Structured Array

ScrGetLayerThickness(string layerName) -> double

ScrGetLayerType(string layerName) -> int

ScrGetLayoutLengthUnit() -> string

 $Ser Get Metal Layer Filler Material (string\ layer Name Bstr) {\it ->} string$

ScrGetNetNameList() -> Structured Array

ScrGetNetlistOfBondwireProfile(string profileName) -> Structured Array

 $Scr GetNets And Ckt Elems Between Components (string\ partname1,\ string\ refDes1,\ string\ partname2,\ string\ refDes2,\ Structured\ Array\ nets,\ Structured\ Array\ ckt Elems) -> int$

ScrGetNetsAndCktElemsBetweenNets(string net1, string net2, Structured Array nets, Structured Array cktElems) -> int

 $ScrGetPadstackNameList() -\!\!\!> Structured\ Array$

ScrGetPinGroupNameList(string partName, string refDes) -> Structured Array

ScrGetPinPadstackName(string bPartName, string bRefDes, string bPinName) -> string

ScrGetPinsOnNet(string netName, string partName, string refDes, Structured Array pinNames, Structured Array partNames, Structured Array refDesOut) -> int

ScrGetPinsOnPart(string partName, string refDes, Structured Array pinNames, Structured Array netNames) -> int

ScrGetPwrGndNetNameList() -> Structured Array

ScrGetRLCsBetweenNets(Structured Array netNameList, int includeR, int includeL, int includeC, Structured Array cktElems) -> int

ScrGetStackupLayerThickness(string layerName) -> string

 $ScrGetUniqueSimulationName(string\ simType) -> string$

ScrImportAnf(string anfBstr) -> int

ScrImportCapacitorDeratingTable(string bDeratingTablePath, Structured Array errors) -> int

ScrImportComponentFile(string cmpBstr) -> int

ScrImportComponentMapFile(string fileName) -> int

ScrImportCpaSimulationOptions(string bSimSettingsXmlPath) -> int

ScrImportCpmOrPloc(string PLOCFileName, string partName, string refDes, string controlFileName) -> int

ScrImportEDB(string edbBstr) -> int

ScrImportElectromigrationSimSettings(string bxmlSettingsPath, Structured Array warnings, Structured Array errors) -> int

ScrImportGDSII(string fileName, string controlFileBstr) -> int

ScrImportIPC2581(string cvgBstr, string controlFileBstr, string pmapFileBstr) -> int

ScrImportLayerStackup(string fileName) -> int

ScrImportLayerStackupFile(string fileName) -> int

ScrImportLayerStackupXML(string bXmlStackupPath) -> int

ScrImportPmap(string fileName) -> int

ScrImportSIwaveSimulationOptions(string bSimSettingsXmlPath) -> int

ScrImportSettingsFile(string sefBstr) -> int

ScrImportXfl(string xflBstr) -> int

ScrInterpolateSpectrum(int interpolate)

ScrLogMessage(string msg)

ScrMergeConnectedNets(Structured Array inNetNameList) -> Structured Array

ScrNetGetLength(string netName, string sourceName, string sinkName) -> double

ScrNetIsDisjoint(string netName) -> int

ScrNetIsSelected(string netName) -> int

ScrNetSeparate(string netName)

ScrNetSetDummy(string netName)

ScrNetSetSelected(string netName, int select)

ScrPlaceCircuitElement(string givenElementName, string givenPartName, int circuitElementType, int posTermConnectionType, string posTermParam1, string posTermParam2, string posTermParam3, int refTermConnectionType, string refTermParam1, string refTermParam2, string refTermParam3, double capVal, double indVal, double resVal, double refZRe, double mag, double phase) -> short

ScrPlaceCircuitElementsToNearestRefPin(int circuitElementType, double val, string posPartName, string posUnitName, string posNetName, string refPartName, string refPartName, string refPartName, string refNetName, string re

ScrPlaceFreqDependentSrc(string givenElementName, int circuitElementType, int posTermConnectionType, string posTermParam1, string posTermParam2, string posTermParam3, int refTermConnectionType, string refTermParam2, string refTermParam3, string fileName) -> short

ScrPlacePortsAcrossRLCs(double zref, string rlcName, string rlcType, Structured Array portsCreated) -> int

ScrPlacePortsAtPinsOnSelectedNets(double zref, string refNetName, int connectToPinGroup, Structured Array portsCreated) -> int

ScrPlacePortsAtPinsOnSelectedNetsExcludePart(double zref, string refNetName, string partName, string refDes, int connectToPinGroup, Structured Array portsCreated) -> int ScrPlacePortsAtPinsOnSelectedNetsPinNamesOut(double zref, string refNetName, int connectToPinGroup, Structured Array portsCreated, Structured Array posPinNames, Structured Array refPinNames) -> int

ScrPlotResModeVoltageDiff(string simName, [string layerA /*optional*/], [string layerB /*optional*/]) -> int

ScrPreserveNetsGivenInFile(string fileName)

ScrReadDCLoopResInfo(string simName, Structured Array sourceNames, Structured Array loopResData) -> int

ScrRestoreResonantModeMinFreq()

ScrRunDcSimulation(int reprocessGeom) -> short

ScrRunFarFieldSimulation() -> short

ScrRunFrequencySweepSimulation() -> short

ScrRunIcepakSimulation(string icepakSimName, string dcSimName) -> short

ScrRunInducedVoltageSimulation(double freq, double phi, double theta, double e0_phi, double e0_theta, double e0_magnitude) -> short

ScrRunNearFieldSimulation(double freq, int computeH) -> short

ScrRunResonantModeSimulation() -> short

ScrRunSimulation(string simType, string simName) -> short

ScrRunSpiceSubcktSimulation() -> short

ScrRunSyzParameterSimulation() -> short

ScrRunValidationCheck() -> Structured Array

 $ScrRunValidationCheckWithOptions(Structured\ Array\ optionArray,\ int\ simType) -> Structured\ Array\ optionArray,\ int\ simType) -> Structured\ Array\ optionArray\ optionA$

ScrSIwaveEnableReturnCurrentDistribution(int flag)

 $ScrSIwaveEnable_3D_DDM(int\ flag)$

ScrSIwaveIncludeSourceParasitics(int flag)

ScrSIwaveSyzComputeExactDcPoint(int flag)

ScrSIwaveSyzEnforceCausality(int enforce)

ScrSIwaveSyzEnforcePassivity(int enforce)

ScrSanitizeLayout()

ScrSanitizeNets(Structured Array netNameList) -> int

ScrSaveProjectAs(string projname) -> int

 $ScrSaveSimulationMessages(string\ simName,\ string\ outFilePath) \rightarrow int$

ScrSaveToPngFile(string fileName)

ScrSelectDcConnectedNets(Structured Array netNameList) -> int

ScrSelectNet(string netName, int select) -> int

ScrSelectNetsBetweenComponents(string partname1, string refDes1, string partname2, string refDes2) -> int

ScrSelectNetsBetweenNets(string net1, string net2) -> int

ScrSeparateDisjointNets() -> int

 $ScrSet4PtBwProfile(string\ bwModelName,\ double\ h1,\ double\ h2,\ double\ radius) -> int$

ScrSet4ptBondwireParameters(string layerName, double radius, double h1, double h2, int flipped) -> int

 $ScrSet5PtBwProfile(string\ bwModelName,\ double\ h1,\ double\ h2,\ double\ radius,\ double\ alpha,\ double\ beta) -> int$

ScrSet5ptBondwireParameters(string layerName, double radius, double h1, double h2, double alpha, double beta, int flipped) -> int

ScrSetAntiPadOnLayer(string padstackName, string layerName, string shape, string width, string height) -> int

ScrSetBwModel(Structured Array bwIndexArray, string bwModelName) -> int

ScrSetBwSuppLayer(Structured Array bwIndexArray, string suppLayerName) -> int

ScrSetBwTermLayer(Structured Array bwIndexArray, string termLayerName) -> int

ScrSetCapacitorDcBiasDeratingSim(string dcSimName) -> short

ScrSetCapacitorTemperatureDeratingSim(string icepakSimName) -> short

ScrSetConformalCoatLayers(int setConformalCoat) -> int

ScrSetCrossTalkThreshold(double xtalkInDb) -> int

 $ScrSetCrosstalkScanParameters (double\ FEXTWarningLevel,\ double\ FEXTViolationLevel,\ double\ NEXTWarningLevel,\ double\ NEXTW$

ScrSetDcMinPlaneAreaToMesh(string dcMinPlaneAreaToMesh)

ScrSetDcMinVoidAreaToMesh(string dcMinVoidAreaToMesh)

ScrSetDcPowerDataThresholds(double minThermCellSizeInUm, double minPwrLossPerCellInMilliwatts)

ScrSetDieElevation(string dieName, double elevation) -> int

ScrSetDieThickness(string dieName, double thickness) -> int

ScrSetEmiScannerParameters(string rulesFilename, int rulesProfileIndex, string tagsFilename) -> int

 $ScrSetEnergyErrorPercentInDcSimulation (double\ energyErrorPercent)$

ScrSetExternalExcitations(string filePath)

ScrSetFarFieldSimOptions(double phiStart, double phiStop, int phiStepSize, double thetaStart, double thetaStop, int thetaStepSize) -> int

ScrSetFwsColFitOptions(int opt)

ScrSetFwsLaunchDesignerNexxim(int launch)

ScrSetFwsPassivityAlg(int alg)

ScrSetFwsPortRefZ(int renormalize, double refZ)

ScrSetFwsPzOptions(double fitError, int maxOrder)

ScrSetFwsSsfAlg(int alg)

ScrSetFwsSubcktFormat(int format)

ScrSetFwsUseCommonGround(int useCommonGround)

ScrSetHFSS3DLayoutSimOptions(string fileName) -> int

ScrSetHpcLicenseType(string licenseType) -> int

ScrSetHpcLicenseVendor(string licenseVendor) -> int

ScrSetIcepakBoardOutlineFidelity(double distInMM) -> short

 $Scr Set Icepak Cabinet Dimensions (double \ horizPad Percent, \ double \ vert Above Pad Percent, \ double \ vert Below Pad Percent) \\ -> short$

ScrSetIcepakComponentConfig(string fileName) -> int

ScrSetIcepakMeshingDetail(string meshLevel) -> short

ScrSetIcepakRepeat(int repeat, double dcPwrConvergencePercent) -> int

 $ScrSetIcepakSimReportImageHeight(int\ imgHeight) -> int$

 $ScrSetIcepakTemperatureFile(string\ tempBstr) -> int$

ScrSetIcepakThermalEnv(int convection, int forcedAir, double topOrAmbientTempC, string topOrOverallFlowDir, double topOrOverallFlowSpeed, double bottomTempC, string bottomFlowDir, double bottomFlowSpeed, double gravVecX, double gravVecY, double gravVecY, double gravVecY.

ScrSetIdealGroundNodeInDcSimulation(string sourceName, int terminalToGround) -> int

 $ScrSetInducedVoltageMultipleIncidenceSpherical(double\ phi_start,\ double\ phi_step,\ double\ phi_step,\ double\ theta_start,\ double\ theta_start,\ double\ theta_step,\ double\ e0_phi,\ double\ e0_theta,\ int\ save_for_all_angles,\ double\ e0_magnitude) -> int$

ScrSetInducedVoltageSingleIncidenceCartesian(double incidence_x, double incidence_y, double incidence_z, double e0_x, double e0_y, double e0_z, double e0_magnitude) -> int

ScrSetInducedVoltageSingleIncidenceSpherical(double phi, double theta, double e0_phi, double e0_theta, double e0_magnitude) -> int

ScrSetInfiniteGroundPlaneLocation(double elev) -> int

ScrSetLayerMaterial(string layerNameBstr, string layerMaterialBstr) -> int

 $ScrSetLayerThickness(string\ layerNameBstr,\ double\ thickness,\ int\ redraw) -> int$

ScrSetLayerType(string layerName, int type)

ScrSetLayerVisibility(string layerNameBstr, int planeVis, int traceVis, int padVis, int viaVis, int cktElemVis) -> int

ScrSetLayoutLengthUnit(string layoutLenUnit) -> int

 $ScrSetLocalRefinementPercentInDcSimulation (double\ localRefinePercent)$

ScrSetLogFreqPointDist(int flag)

ScrSetLowBondwireParameters(string layerName, double radius, double h1, double h2, double alpha, double beta, int flipped, string unitsBstr) -> int

ScrSetLowBwProfile(string bwModelName, double h1, double h2, double radius, double alpha, double beta, string unitsBstr) -> int

ScrSetMaxCoupledLines(int maxCoupledLines) -> int

 $ScrSetMaxRefinePassesInDcSimulation(int\ maxPasses)$

 $ScrSetMeshBondwiresInDcSimulation (int\ meshBws)$

ScrSetMeshViasInDcSimulation(int meshVias)

ScrSetMetalLayerFillerMaterial(string layerNameBstr, string layerFillerMaterialBstr) -> int

 $ScrSetMinCoupledTraceLength(double\ minCoupledTraceLen,\ string\ unitsBstr)$

ScrSetMinCutoutArea(double minVoidArea, string unitsBstr)

ScrSetMinPadAreaToMesh(string minPadAreaToMesh)

ScrSetMinPlaneAreaToMesh(string minPlaneAreaToMesh)

ScrSetMinRefinePassesInDcSimulation(int minPasses)

ScrSetNearFieldMeshingFrequencyDefault() -> int

ScrSetNearFieldMeshingFrequencyPoints(Structured Array freqPoints) -> int

ScrSetNearFieldMeshingFrequencyRange(double startFreq, double stopFreq) -> int

ScrSetNearFieldPlotName(string plotNameBstr) -> int

ScrSetNearFieldSamplePointSpacing(double spacing) -> int

ScrSetNearFieldSolverOptions(int minAdaptPasses, int maxAdaptPasses, double gErrorTol) -> int

ScrSetNearFieldSurfaceOffset(double px, double nx, double py, double ny, double pz, double nz) -> int

ScrSetNumBondwireSidesInDcSimulation(int numBwSides)

ScrSetNumCpusToUse(short numCpus)

ScrSetNumModesToCompute(int numModes)

ScrSetNumViaSidesInDcSimulation(int numViaSides)

ScrSetOptionsFor3DModelExport(string fileName) -> int

ScrSetPadOnLayer(string padstackName, string layerName, string shape, string width, string height) -> int

 $ScrSetPadstackMaterial(string\ padstackNameBstr,\ string\ padstackMaterialBstr) -> int$

ScrSetPadstackViaPlatingAbsolute(string padstackName, string viaPlatingAbsolute) -> int

ScrSetPadstackViaPlatingRatio(string padstackName, double viaPlatingRatio) -> int

ScrSetPlotAfterDcSimulation(int plot)

ScrSetPlotLayers(string plotLayer, string refLayer) -> short

ScrSetPlotSyzMag(int flag)

ScrSetPlotSyzPhase(int flag)

ScrSetPortNamingConvention(string namingConvention) -> int

ScrSetPortTerminalType(string bPortName, string bTerminalType) -> int

ScrSetPowerGroundNets(Structured Array netNames, int appendToCurrentNetsSelected) -> int

ScrSetPowerGroundNetsFromFile(string filePath, int appendToCurrentNetsSelected) -> int

ScrSetProjectModified(int p)

ScrSetPsiOptionsFromFile(string fileName) -> int

ScrSetPsiPortType(string portName, string porttype) -> int

ScrSetPsiSyzInterpOptions(int interp, int fastsweep, int adaptiveSamp, int enforceDC) -> int

ScrSetRLCValues(string partName, string r, string l, string c) -> int

ScrSetRefineBondwiresInDcSimulation(int refineBws)

ScrSetRefineDcSimulation(int refine)

ScrSetRefineViasInDcSimulation(int refineVias)

ScrSetRemoveCutoutsByArea(int p)

ScrSetResonantModeMaxFreq(double maxFreq)

ScrSetResonantModeMinFreq(double minFreq)

ScrSetSignalNets(Structured Array netNames, int appendToCurrentNetsSelected) -> int

ScrSetSignalNetsFromFile(string filePath, int appendToCurrentNetsSelected) -> int

ScrSetSimulationName(string simType, string simName) -> int

ScrSetSketchedBwProfile(string bwModelName, string filePath, double radius) -> int

ScrSetSketchedBwProfileFromArray(string bwModelName, string units, Structured Array bwPoints, double radius) -> int

ScrSetSnapLengthThreshold(string snapLengthThreshold)

ScrSetSolderballMaterial(string padstackName, string materialName) -> int

ScrSetSolderballParameters(string padstackName, int aboveStackup, double height, double radius) -> int

ScrSetSourceMagnitude(string refDes, string magnitude) -> int

 $ScrSetSparam Model Setup (string\ partName,\ Structured\ Array\ active RefDes List,\ string\ file Name,\ string\ model ame,\ string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string file Name,\ string\ model ame,\ string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string file Name,\ string\ model ame,\ string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string file Name,\ string\ model ame,\ string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ Structured\ Array\ pinOrder) -> interval to the string\ refNet,\ string\ refNet$

ScrSetSpiceModelSetup(string partName, Structured Array activeRefDesList, string fileName, string modelame, Structured Array pinOrder) -> int

ScrSetSpiceSubcktFormat(string format)

ScrSetStackupLayerThickness(string layerNameBstr, string thickness, int redraw) -> int

ScrSetStackupLayerThicknessUnit(string layerThicknessUnit) -> int

 $ScrSetSweepFreqRange(double\ minFreq,\ double\ maxFreq)$

ScrSetSweepMaxFreq(double maxFreq)

ScrSetSweepMinFreq(double minFreq)

ScrSetSweepNumFreqPoints(int numPts)

ScrSetSyzInterpSweep(int p)

 $ScrSetSyzInterpSweepParams(double\ convergence,\ int\ maxInterpPts) -> int$

ScrSetTDCrosstalkScanParameters(Structured Array partNameList, Structured Array refDesNameList, Structured Array pinNameList, Structured Array impedanceList,

Structured Array typeList, Structured Array riseTimeList, Structured Array voltageList) -> int

 $ScrSetThermalPadOnLayer(string\ padstackName,\ string\ layerName,\ string\ shape,\ string\ width,\ string\ height) -> int$

 $ScrSetTouchstoneExportFormatToDb (int\ exportInDb)$

ScrSetTouchstonePortOrder(Structured Array portNamesList) -> int

 $ScrSetTouchstonePortRemapping(string\ portName,\ string\ namingConv) \rightarrow int$

 $ScrSetTraceCouplingDistance(double\ traceCouplingDist,\ string\ unitsBstr)$

ScrSetZ0ScanParameters(double impedance, double warningThreshold, double violationThreshold) -> int

ScrSetZ0ScanReportImageHeight(int imgHeight) -> int

ScrShowSelectedNetsOnly(int selOnly)

ScrTPADeleteNetsNotBeingSolvedFor() -> int

ScrTPADrawAutoPlaneExtents() -> int

ScrTPAExportSolution(string SolutionName, string outFileName, string outputType, int numberOfCells, int lossless, int couplingLimits, double capacitance, double inductance, double resistance, double conductance, int ignoreMutualResistance) -> int

ScrTPAExportSolutionVer2(string SolutionName, string outFileName, string outputType, int numberOfCells, int lossless, int couplingLimits, double capacitance, double inductance, double resistance, double conductance, double targetACFrequency, int ignoreMutualResistance) -> int

ScrTPAExportSpreadSheet(string SolutionName, string outFileName) -> int

ScrTPAGetExcitationCoord(string netName, string terminalName) -> Structured Array

ScrTPAGetNumSinks(string netName) -> int

ScrTPAGetNumSources(string netName) -> int

ScrTPAGetNumberOfPartitions() -> int

ScrTPAGetSinkNameList(string netName) -> Structured Array

ScrTPAGetSourceNameList(string netName) -> Structured Array

ScrTPAIgnoreBondwiresWhileCoupling(int ignoreBWs)

ScrTPAIgnoreDummyNets(int doIgnore)

ScrTPAIgnoreNonFunctionalPads(int doIgnore)

ScrTPAMergeDivergentBondwires(int doMerge)

ScrTPAPassBondwirePoints(int sizeIn, double bwPoints) -> int

ScrTPASelectNet(string netName, int select) -> int

ScrTPASetACResistanceFrequency(double freqVal)

ScrTPASetAllSignalNetsToSolve() -> int

ScrTPASetCuttingDistance(double cuttingDistance, string unitsBstr)

ScrTPASetDielectricExtent(double extent, string unitsBstr)

ScrTPASetExtendedExportOptions(string rlExportMethod, int includeGMat)

ScrTPASetIgnorePowerGround(int ignorePowerGround)

ScrTPASetInfiniteGroundExists(int InfiniteGroundExists)

ScrTPASetInfiniteGroundLocation(double InfiniteGroundLocation, string unitsBstr)

 $ScrTPASetLoosely Coupled Nets Percentage (double\ loosely Coupled Nets Percentage)$

ScrTPASetMaximumEdgeLength(double MaximumEdgeLength)

ScrTPASetMaximumFrequency(double MaximumFrequency)

ScrTPASetMergeSinks(int mergeSinks)

ScrTPASetMergeSources(int mergeSources)

ScrTPASetModelReductionPasses(int ModelReductionPasses)

ScrTPASetMoldingCompoundMaterial(string materialName)

ScrTPASetMoldingCompoundThickness(double thickness, string unitsBstr)

ScrTPASetNumberOfProcesses(int numberOfProcesses)

ScrTPASetNumberOfThreadsPerPartition (int numberOfThreadsPerPartition)

ScrTPASetPadArcCoarseness(int PadArcCoarseness)

ScrTPASetPlaneArcCoarseness(int PlaneArcCoarseness)

ScrTPASetPowerGroundNet(string netName, int appendToCurrentNetsSelected) -> int

ScrTPASetPowerGroundNets(Structured Array netNames, int appendToCurrentNetsSelected) -> int

ScrTPASetPowerGroundNetsFromFile(string fileName, int appendToCurrentPwrGrndsSelected) -> int

ScrTPASetPreferredNetGroupSize(int preferredNetGroupSize)

ScrTPASetRefinementACRLMaxNumPasses(int numPasses)

ScrTPASetRefinementACRLPercentError(double percent)

ScrTPASetRefinementACRLPercentPerPass(double percent)

ScrTPASetRefinementCGMaxNumPasses(int numPasses)

 $ScrTPASetRefinementCGPercentError(double\ percent)$

ScrTPASetRefinementCGPercentPerPass(double percent)

 $ScrTPASetRefinementMethod(string\ methodName)$

ScrTPASetRefinementType(int RefinementType)

ScrTPASetRemoveLooselyCoupledNets(int removeLooselyCoupledNets)

 $ScrTPASetSignalNetToSolve(string\ netName,\ int\ appendToCurrentNetsSelected) -> int$

ScrTPASetSignalNetsToSolve(Structured Array netNames, int appendToCurrentNetsSelected) -> int

 $ScrTPASetSignalNetsToSolveFromFile(string\ fileName,\ int\ appendToCurrentNetsSelected) -> int$

ScrTPASetSignalRiseTime(double SignalRiseTime)

ScrTPASetSolutionMethod(int SolutionMethod)

 $ScrTPASetSolutionMode (int\ SolutionMode,\ int\ FloatingGeometryMode)$

ScrTPASetSolutionName(string SolutionName)

ScrTPASetSolveSelectedNetsOnly(int solveSelectedNetsOnly)

ScrTPASetTargetFreqForExportSolution(double targetACFrequency)

 $ScrTPASetTraceArcCoarseness (int\ TraceArcCoarseness)$

ScrTPASetUseZCuttingDistance(int useZCuttingDistance)

ScrTPASetXYCouplingDistance(double xyCouplingDistance, string unitsBstr)

 $ScrTPASetZCouplingDistance (double\ zCouplingDistance,\ string\ unitsBstr)$

ScrTPASetZCuttingDistance(double zCuttingDistance, string unitsBstr)

ScrTPASolve()

ScrTPASolveForParameters(int solveForCapacitance, int solveForDCResistanceInductance, int solveForACResistanceInductance) -> string

ScrTPATestArray(Structured Array pArray) -> int

ScrUnselectAll() -> int

ScrUpdateComponentTree()

ScrUseIcepakTemperatureDataInDc(int use)

ScrUseTouchstonePortRemapping(int remapNames) -> int

SetActiveDesign(string designName) -> IDispatch

SimulateLink(string configStr, IDispatch cb, [string linkType /*optional*/], [string msg /*optional*/]) -> int

Solve(string solnName) -> string

StopSimLink(int simID, int abort)

ValidateLink(string linkType, string dataToValidate, string msg) -> int