

| Blackberry |
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| connected : bool context : Context, NoneType i monitor : NoneType name : str parent previous_request : NoneType pvs : dict request : NoneType status : NoneType status_signal working : bool |
| connection(address) initialize() receive_request(value) run() send_status() set_monitor(monitor) stop() |

| Blueberry |
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| ROI : list calibration_angle : int camera : InstantCamera, NoneType connected : bool converter : ImageFormatConverter current : float destination_points : float32 do_transformation : bool exposure_time : NoneType filter_code : NoneType filter_para : dict flip_rl : int flip_ud : int frame : NoneType, int gain : NoneType, float graph_signal idx : NoneType intensity_line : list outdir parent : NoneType pixel_per_mm : list plot_signal queue_for_analyze repeat : NoneType resized_pixel : NoneType return_queue rotate_angle : float rotation : int save_signal screen_signal thread_logger signal url : NoneType watch_signal working : bool |
| connection(url) receive_signal(idx, value) receive_signal_from_setup(idx, value) redraw_signal(name) run() set_action() show_screen(image) stop() take_a_picture(Setup) take_data_from_queue() |

| DigiLabel |
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| clicked ldclicked left : bool, NoneType move rdclicked x : NoneType x_end : NoneType y : NoneType y_end : NoneType |
| mouseDoubleClickEvent(event) mouseMoveEvent(event) mousePressEvent(event) mouseReleaseEvent(event) |

| EmittanceWindow |
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| charge : float current : list drift : float effective_length : float glayout : GraphicsLayout gview : GraphicsView images : dict kinetic_energy : float logger : Logger, RootLogger, NoneType logger_signal momentum : float outdir parent plotFitError : PlotItem plotSize : PlotItem plotXbeamSize : PlotItem plotYbeamSize : PlotItem profileX : PlotItem profileY : PlotItem readonly_parameters : dict rest_mass : float rigidity : float speed_of_light : int user_setting_parameters : dict xbeam_size : list xbeam_squared : dict ybeam_size : list ybeam_squared : dict |
| calculate_parameters() click_cancel() click_ok() closeEvent(event) focal_length(values) initialize_measurement() initialize_tablet() measure_emittance() receive_signal() return_para() set_action() update_plots() |

| Gooseberry |
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| address : str client_socket : socket connected : bool name : str port : int |
| connection(url) initialize() send_command(cmd) |

| HiddenWindow |
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| password |
| click_cancel() click_ok() return_para() set_action() |

| Item |
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| label layout linevalue pushbtn |
| add_lineedit(name, makebtn) |

| LogStringHandler |
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| target_widget |
| emit(record) |

| MainWindow |
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| beamx : NoneType beamx_size : list beamy : NoneType beamy_size : list blackberry blueberry calibrated : bool camera_connected : bool controller_connected : bool dialog : bool filtered_images : list iconGreenLight iconRedLight iconSize image_size : list images_names : list intensity_line : list keyHidden labelCamera last_picture : NoneType layoutMargin : int layoutSpacing : int liveCurve liveYCurve livex : NoneType livey : NoneType logger : RootLogger, Logger, NoneType main_size : list names_for_saving : list names_for_table : list original_images : list parameter_signal plotLiveX : PlotWidget plotLiveY : PlotWidget plotProfileX : PlotWidget plotProfileY : PlotWidget plot_beamx_size : list plot_beamy_size : list plot_livex_size : list plot_livey_size : list plot_profile_size : list previous : list profile : NoneType queue_for_analyze redraw_signal return_queue setup starttime : NoneType timer |
| actuator_status(message) closeEvent(event) close_server() initialize() measure_emittance() open_image() receive_log(level, message) resizeEvent(event) save_image(image) save_pretty_plot(transformed_image, xbin, ybin, xhist_percent, yhist_percent, xfitline, yfitline) set_action() set_checked(checkbox, checked) set_line() setup_module() stopwatch(start) timeout() update_screen(target, graphics, additional_curves) update_table(gradient, beamx, beamy, image) |

| SetupWindow |
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| ROI : list calibrated : bool calibration_angle : int, float calibration_image : NoneType calibration_image_aratio : NoneType calibration_image_backup : NoneType calibration_image_name : str calibration_image_screen_size : tuple camera_connected : bool camera_sdk : str captured_image : NoneType captured_image_aratio : NoneType captured_image_screen_size : tuple controller_connected : bool destination_points : list draw_square : bool exposure_time : int filter_code : NoneType filter_para : NoneType, dict gain : int image_for_ROI : NoneType labelImage labelOrigin gridResult gridTwiss groupBox groupParameters original_points : list parent perspective_method : NoneType, str pixel_per_mm : list points : list ratio_height : float, int ratio_width : float, int reset_all : bool resized_points : list select_ROI : bool send_signal_to_blueberry transform_matrix transformed_image |
| apply_ROI(reset) capture_calibration_image() click_cancel() click_ok() closeEvent(event) connect_network(berry, checkbox) convert_image() draw_calibration_image(image, origin) draw_circle() draw_image(image, label, screen_size, aspect_ratio, image_processing) draw_rectangle() initialize_parameter(reset) keyPressEvent(event) keyReleaseEvent(event) load(filename) load_calibrated_image() load_filter_parameters(reset) move_circle(key) open_calibration_image() return_para() save(last) set_ROI() set_action() set_checked(checkbox, state) set_monitor() set_photo_para(idx, slider) set_rotation_angle(up) set_sdk() take_a_picture(calibration) |

| Ui_EmittanceWindow |
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| buttonBox comboBoxMethod framePlot gridEmittance gridLayout gridParameters gridPlots gridResult gridTwiss groupBox groupParameters labelAlpha labelBeta labelEmitX labelEmitY labelEmittance labelGamma labelTwiss labelTwissX labelTwissY labelUnit1 labelUnit2 lineAlphaX lineAlphaY lineBetaX lineBetaY lineEmittanceX lineEmittanceY lineGammaX lineGammaY lineRepeat lineRepeatRange lineRepeatRate linePosition labelRepeat labelRepeatRange labelRotation labelScreen labelScreenStatus lineControllerIP1 lineControllerIP2 lineControllerIP3 lineControllerIP4 lineControllerIP5 lineExposureTime lineGain lineHeight pushEmittance pushFlipRightLeft pushFlipPerMM_x pushFlipPerMM_y lineQuad1x lineQuad1y lineQuad2x lineQuad2y lineQuad3x lineQuad3y lineQuad4x lineQuad4y lineRotationAngle lineWidth lineX0 lineY0 listParameters pushAngleDown pushAngleUp pushApplyConf pushCapture pushCancel pushConnectCamera pushConnectController pushConvert pushFilterApply pushLoad pushOk pushOpenImage pushSave sliderAngle sliderExposureTime sliderGain sliderHeight sliderWidth sliderX0 sliderY0 tabCalibration tabConnection tabPhoto tabPoint tabRectangle tabWidget tabWidget_2 textConnectionLog verticalSpacer verticalSpacer_2 verticalSpacer_3 verticalSpacer_4 verticalSpacer_5 |
| retranslateUi(MainWindow) setupUi(MainWindow) |

| Ui_HiddenWindow |
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| buttonBox gridLayout label lineEdit |
| retranslateUi(CloseServer) setupUi(CloseServer) |

| Ui_MainWindow |
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| actionCamera actionController actionExit actionNew actionOpen actionSave centralwidget frameCamera frameCameraViewer frameLiveXProfile frameLiveYProfile frameLog frameProfile frameProfileViewer frameProfileX frameProfileY gridBeamSizeX gridBeamSizeY gridCameraViewer gridCapture gridCentral gridLayout gridLayout_4 gridLayout_5 gridLayout_6 gridLayout_7 gridLiveXProfile gridLiveYProfile gridProfile gridProfileViewer gridScreen gridSubControl groupBox groupProfile horCurrent horProfileButtons horRotation horSpacerCurrent horSpacerLog horSpacerProfileButtons horSpacerRotation horSpacerScreen horizontalLayout_2 horizontalLayout_3 labelCalibrationPixmap labelCamera labelCameraPixmap labelControllerPixmap labelCurrent labelFrameRange labelFrameRate labelPosition labelRepeat labelRepeatRange labelRotation labelScreen labelScreenStatus lineControllerIP1 lineControllerIP2 lineControllerIP3 lineControllerIP4 lineControllerIP5 lineExposureTime lineGain lineHeight pushEmittance pushFlipRightLeft pushFlipPerMM_x pushFlipPerMM_y lineQuad1x lineQuad1y lineQuad2x lineQuad2y lineQuad3x lineQuad3y lineQuad4x lineQuad4y lineRotationAngle lineWidth lineX0 lineY0 listParameters pushAngleDown pushAngleUp pushApplyConf pushCapture pushCancel pushConnectCamera pushConnectController pushConvert pushFilterApply pushLoad pushOk pushOpenImage pushSave sliderAngle sliderExposureTime sliderGain sliderHeight sliderWidth sliderX0 sliderY0 tabCalibration tabConnection tabPhoto tabPoint tabRectangle tabWidget tabWidget_2 textConnectionLog verticalSpacer verticalSpacer_2 verticalSpacer_3 verticalSpacer_4 verticalSpacer_5 |
| retranslateUi(SetupWindow) setupUi(SetupWindow) |

| Ui_SetupWindow |
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| checkCalibration checkCameraConnected checkConnection checkControllerConnected checkSaveLast checkUseControlServer comboBoxFilter comboBoxMonitor comboBoxSDKType comboBoxSetup frameImage frameOrigin frameTrans gridCamera gridLayout gridLayout_10 gridLayout_11 gridLayout_13 gridLayout_14 gridLayout_15 gridLayout_2 gridLayout_3 gridLayout_4 gridLayout_5 gridLayout_6 gridLayout_7 gridLayout_8 gridLayout_9 groupCamera groupCameraConnection groupControllerConnection groupFilter groupROI horStatus horizontalLayout horizontalLayout_2 horizontalLayout_3 horizontalSpacer horizontalSpacer_10 horizontalSpacer_2 horizontalSpacer_4 horizontalSpacer_6 horizontalSpacer_7 horizontalSpacer_9 label labelControllerIP1 labelControllerIP2 labelControllerIP3 labelControllerIP4 labelControllerIP5 labelExplanation labelExplanation2 labelExposureTime labelExposureTimeRange labelGam labelGainRange labelHeight labelIP labelImage labelMonitorNumber labelOrigin labelPerspective labelPosition labelRotationAngle labelSDKType labelSP labelSPPixel labelSize labelSizePixel labelTrans labelWidth labelX0 label_10 label_11 label_12 label_13 label_14 label_16 label_17 label_2 label_3 label_4 label_5 label_6 label_7 label_8 label_9 lineCameraAddr lineControllerIP1 lineControllerIP2 lineControllerIP3 lineControllerIP4 lineControllerIP5 lineExposureTime lineGain lineHeight linePixelPerMM_x linePixelPerMM_y lineQuad1x lineQuad1y lineQuad2x lineQuad2y lineQuad3x lineQuad3y lineQuad4x lineQuad4y lineRotationAngle lineWidth lineX0 lineY0 listParameters pushAngleDown pushAngleUp pushApplyConf pushCapture pushCancel pushConnectCamera pushConnectController pushConvert pushFilterApply pushLoad pushOk pushOpenImage pushSave sliderAngle sliderExposureTime sliderGain sliderHeight sliderWidth sliderX0 sliderY0 tabCalibration tabConnection tabPhoto tabPoint tabRectangle tabWidget tabWidget_2 textConnectionLog verticalSpacer verticalSpacer_2 verticalSpacer_3 verticalSpacer_4 verticalSpacer_5 |
| retranslateUi(SetupWindow) setupUi(SetupWindow) |

| Variables |
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| Center : Optional[float] Cols : Optional[int] Manufacturer : Optional[str] PixelSpacing : list Position : list Rows : Optional[int] Thickness : Optional[float] |