

wfg_system_modelling

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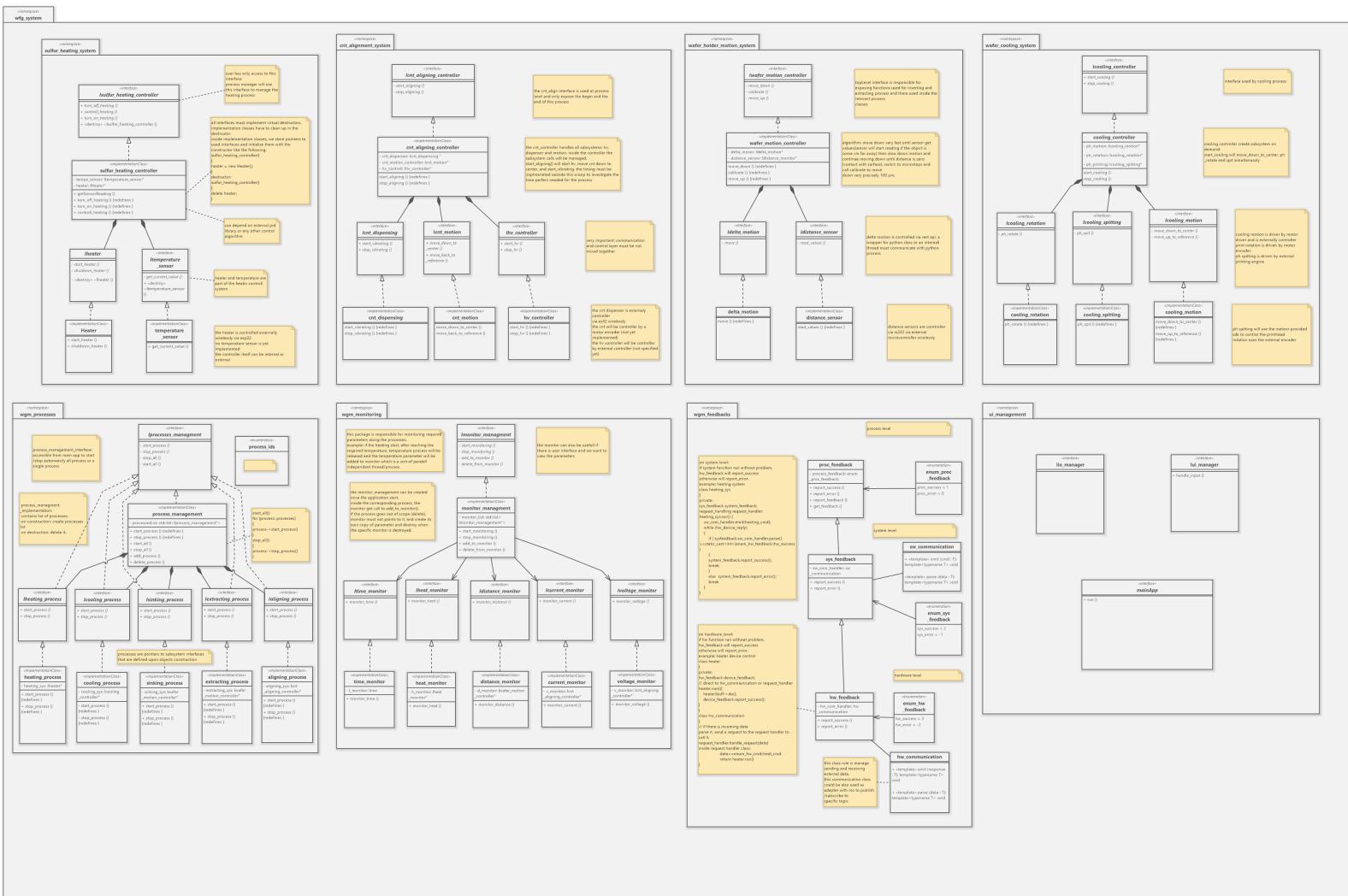
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- 1.1.60 Idistance_monitor
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- 1.1.63 mainApp

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1 wfg_v2

1.1 Specification_perspective



Name	ID	Type
wfg_system	PKG002	package
wafer_holder_motion_system	PKG003	package
Idelta_motion	I005	uml-interface-classifier
Idistance_sensor	I006	uml-interface-classifier
wafer_motion_controller	C016 5	class
Iwafer_motion_controller	I004	uml-interface-classifier
delta_motion	C017	class

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Icnt_motion	I009	uml-interface-classifier
Icnt_aligning_controller	I007	uml-interface-classifier
cnt_aligning_controller	C012	class
Ihv_controller	I010	uml-interface-classifier
cnt_dispensing	C013	class
cnt_motion	C014	class
hv_controller	C015	class
wafer_cooling_system	PKG005	package
Icooling_rotation	I012	uml-interface-classifier
Icooling_motion	I013	uml-interface-classifier
Icooling_spitting	I014	uml-interface-classifier
cooling_rotation	C019	class
cooling_spitting	C020	class
cooling_motion	C021	class
Icooling_controller	I011	uml-interface-classifier
cooling_controller	C022	class
wgm_processes	PKG006	package
heating_process	C023	class
Iprocesses_managment	I015	uml-interface-classifier
Iheating_process	I016	uml-interface-classifier
Icooling_process	I017	uml-interface-classifier
Isinking_process	I018	uml-interface-classifier
Ialigning_process	I019	uml-interface-classifier
process_management	C024	class
Iextracting_process	I020	uml-interface-classifier
cooling_process	C025	class
sinking_process	C026	class
extracting_process	C027	class
aligning_process	C028	class
process_ids	E001 6	enumeration
sulfur_heating_system	PKG001	package
Isulfur_heating_controller	I001	uml-interface-classifier

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sulfur_heating_controller	C004	class
wgm_feedbacks	PKG007	package
enum_hw_feedback	E002	enumeration
enum_sys_feedback	E003	enumeration
proc_feedback	C035	class
sys_feedback	C036	class
hw_feedback	C037	class
enum_proc_feedback	E004	enumeration
hw_communication	C039	class
sw_communication	C041	class
wgm_monitoring	PKG008	package
monitor_managment	C029	class
time_monitor	C030	class
heat_monitor	C031	class
distance_monitor	C032	class
current_monitor	C033	class
voltage_monitor	C034	class
Imonitor_managment	I027	uml-interface-classifier
Icurrent_monitor	I034	uml-interface-classifier
IVoltage_monitor	I031	uml-interface-classifier
Iheat_monitor	I030	uml-interface-classifier
Idistance_monitor	I029	uml-interface-classifier
Itime_monitor	I028	uml-interface-classifier
ui_management	PKG009	package
Iio_manager	I037	uml-interface-classifier
Iui_manager	I036	uml-interface-classifier
mainApp	C008	class

*Operations***read_values****1.1.3 wafer_motion_controller***Attributes*

Name	Type	Multiplicity	Description	Tagged Values
delta_move	Idelta_motion*			
distance_sensor	Idistance_monitor*			

*Operations***move_down****calibrate****move_up****1.1.4 Iwafer_motion_controller***Operations***move_down****calibrate****move_up**

Operations

move

1.1.6 distance_sensor

Operations

read_values

1.1.7 Icnt_dispensing

Operations

start_vibrating

stop_vibrating

1.1.8 Icnt_motion

Operations

move_down_to_center

move_back_to_reference

1.1.9 Icnt_aligning_controller

Operations

1.1.10 cnt_aligning_controller

Attributes

Name	Type	Multiplicity	Description	Tagged Values
cnt_dispenser	Icnt_dispenser *			
cnt_motion_controller	Icnt_motion *			
hv_controller	Ihv_controller*			

Operations

start_aligning

stop_aligning

1.1.11 Ihv_controller

Operations

start_hv

stop_hv

1.1.12 cnt_dispensing

Operations

1.1.13 cnt_motion

Operations

move_down_to_center

move_back_to_reference

1.1.14 hv_controller

Operations

start_hv

stop_hv

1.1.15 Icooling_rotation

Operations

ph_rotate

1.1.16 Icooling_motion

Operations

move_down_to_center

move_up_to_reference

ph_spit

1.1.18 cooling_rotation

Operations

ph_rotate

1.1.19 cooling_spitting

Operations

ph_spit

1.1.20 cooling_motion

Operations

move_down_to_center

move_up_to_reference

1.1.21 Icooling_controller

Operations

start_cooling

stop_cooling

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Name	Type	Multiplicity	Description	Tagged Values
ph_motion	Icooling_motion*			
ph_rotation	Icooling_rotation*			
ph_printing	Icooling_spitting*			

Operations

start_cooling

stop_cooling

1.1.23 heating_process

Attributes

Name	Type	Multiplicity	Description	Tagged Values
heating_sys	Iheater*			

Operations

start_process

stop_process

1.1.24 Iprocesses_management

Operations

stop_all

start_all

1.1.25 Iheating_process

Operations

start_process

stop_process

1.1.26 Icooling_process

Operations

start_process

stop_process

1.1.27 Isinking_process

Operations

start_process

stop_process

1.1.28 Ialigning_process

stop_process

1.1.29 process_management

Attributes

Name	Type	Multiplicity	Description	Tagged Values
processesList	std::list<Iprocess_management*>			

Operations

start_process**stop_process****start_all****stop_all****add_process****delete_process**

1.1.30 Extracting_process

Operations

1.1.31 cooling_process

Attributes

Name	Type	Multiplicity	Description	Tagged Values
cooling_sys	Icooling_controller*			

Operations

start_process

stop_process

1.1.32 sinking_process

Attributes

Name	Type	Multiplicity	Description	Tagged Values
sinking_sys	Iwafer_motion_controller*			

Operations

start_process

stop_process

1.1.33 extracting_process

extracting_sys	Iwafer_motion_controller*		
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*Operations***start_process****stop_process****1.1.34 aligning_process***Attributes*

Name	Type	Multiplicity	Description	Tagged Values
aligning_sys	Icnt_aligning_controller*			

*Operations***start_process****stop_process****1.1.35 process_ids****1.1.36 Isulfur_heating_controller***Operations***turn_off_heating**

turn_on_heating

~Isulfur_heating_controller

1.1.37 Itemperature_sensor

Operations

get_current_value

~Itemperature_sensor

1.1.38 Iheater

Operations

start_heater

shutdown_heater

~Iheater

1.1.39 Heater

Operations

start_heater

shutdown_heater

*Operations***get_current_value****1.1.41 sulfur_heating_controller***Attributes*

Name	Type	Multiplicity	Description	Tagged Values
tempe_sens or	Itemperatur e_sensor*			
heater	IHeater*			

*Operations***getSensorReading****turn_off_heating****turn_on_heating****controll_heating****1.1.42 enum_hw_feedback***Items*

Name	Value	Description
hw_success	3	19
hw_error	-2	

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Name	Value	Description
sys_success	2	
sys_error	-1	

1.1.44 proc_feedback

Attributes

Name	Type	Multiplicity	Description	Tagged Values
process_feeback	enum_proc_feedback;			

Operations

report_success

report_error

report_feedback

get_feedback

1.1.45 sys_feedback

Attributes

Name	Type	Multiplicity	Description	Tagged Values
sw_com_handler	sw_communication	20		

report_error**1.1.46 hw_feedback***Attributes*

Name	Type	Multiplicity	Description	Tagged Values
hw_com_handler	hw_communication			

*Operations***report_success****report_error****1.1.47 enum_proc_feedback***Items*

Name	Value	Description
proc_success	1	
proc_error	0	

1.1.48 hw_communication*Operations***emit**

Return type: template<typename T> void

Return type: template<typename T> void

Parameters

Name	Type	Default Value	Description
data	T		

1.1.49 sw_communication

Operations

emit

Return type: template<typename T> void

Parameters

Name	Type	Default Value	Description
cmd	T		

parse

Return type: template<typename T> void

Parameters

Name	Type	Default Value	Description
data	T		

1.1.50 monitor_managment

Attributes

Name	Type	Multiplicity	Description	Tagged Values
monitor_list	std::list<Im	22		

*Operations***start_monitoring****stop_monitoring****add_to_monitor****delete_from_monitor****1.1.51 time_monitor***Attributes*

Name	Type	Multiplicity	Description	Tagged Values
t_monitor	time			

*Operations***monitor_time****1.1.52 heat_monitor***Attributes*

Name	Type	Multiplicity	Description	Tagged Values
h_monitor	Iheat_monit or*			

Operations

Attributes

Name	Type	Multiplicity	Description	Tagged Values
d_monitor	Iwafer_motion_controller*			

*Operations***monitor_distance****1.1.54 current_monitor***Attributes*

Name	Type	Multiplicity	Description	Tagged Values
c_monitor	Icnt_aligning_controller*			

*Operations***monitor_current****1.1.55 voltage_monitor***Attributes*

Name	Type	Multiplicity	Description	Tagged Values
v_monitor	Icnt_aligning_controller*	24		

1.1.56 Imonitor_management

Operations

start_monitoring

stop_monitoring

add_to_monitor

delete_from_monitor

1.1.57 Icurrent_monitor

Operations

monitor_current

1.1.58 Ivoltage_monitor

Operations

monitor_voltage

1.1.59 Iheat_monitor

Operations

monitor_heat

monitor_distance

1.1.61 Itime_monitor

Operations

monitor_time

1.1.62 Iui_manager

Operations

handle_input

1.1.63 mainApp

Operations

run

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