

VHDL Abstract Syntax Tree Reference

- AST nodes of tree are represented by the datatypes listed below. Root node of tree is represented by ROOT(...).
- For example :

ARCHITECTURE_1 | identifier * identifier * architecture_declarative_part *
architecture_statement_part

represents node ARCHITECTURE with children nodes identifier ,
identifier, architecture declarative part, and architecture statement part.

- Child node of a leaf node (generally Keyword) is represented by “unit”

ROOT | design_file

Tick | unit

Lparan | unit

Rparan | unit

Comma | unit

Dot | unit

Colon | unit

Semicolon | unit

Bar | unit

Lsquare | unit

Rsquare | unit

Underscore | unit

Hash | unit

Invertedcomma | unit

Carrot | unit

Lower_case_letter | unit

Upper_case_letter | unit

Digit | unit

DECIMAL_LITERAL | decimal_literal

BASED_LITERAL | based_literal

INTEGER_LITERAL | integer

ACCESS_SUBTYPE_INDICATION | subtype_indication

Expression | expression

NAME | name

Open1 | unit

ACTUAL_PARAMETER_PART | association_list

ACTUAL_DESIGNATOR | actual_designator

FUNCTION_NAME | name * actual_designator
ACROSS_ASPECT | unit
Amp | unit
Plus | unit
Minus | unit
ELEMENT_ASSOCIATION | element_association * element_association list
ALIAS_1 | alias_designator * name
ALIAS_2 | alias_designator * alias_indication * name * signatur
ALIAS_3 | alias_designator * name * signatur
ALIAS_4 | alias_designator * alias_indication * name
ALIAS_DESIGNATOR_1 | identifier
ALIAS_DESIGNATOR_2 | character_literal
ALIAS_DESIGNATOR_3 | string_literal
ALIAS_INDICATION_1 | subtype_indication
ALIAS_INDICATION_2 | subnature_indication
SUBTYPE_INDICATION | subtype_indication
QUALIFIED_EXPRESSION | qualified_expression
ARCHITECTURE_1 | identifier * identifier * architecture_declarative_part *
architecture_statement_part
ARCHITECTURE_2 | identifier * identifier * architecture_declarative_part *
architecture_statement_part * identifier
BLOCK_DECLARATIVE_ITEM | block_declarative_item list
ARCHITECTURE_STATEMENT_PART | architecture_statement list
LABEL_COLON | identifier
ARCHITECTURE_STATEMENT_1 | block_statement
ARCHITECTURE_STATEMENT_2 | process_statement
ARCHITECTURE_STATEMENT_3 | label_colon * concurrent_procedure_call_statement
ARCHITECTURE_STATEMENT_4 | concurrent_procedure_call_statement
ARCHITECTURE_STATEMENT_5 | label_colon * concurrent_assertion_statement
ARCHITECTURE_STATEMENT_6 | concurrent_assertion_statement
ARCHITECTURE_STATEMENT_7 | label_colon * concurrent_signal_assignment_statement
ARCHITECTURE_STATEMENT_8 | concurrent_signal_assignment_statement
ARCHITECTURE_STATEMENT_9 | component_instantiation_statement
ARCHITECTURE_STATEMENT_10 | generate_statement
ARCHITECTURE_STATEMENT_11 | concurrent_break_statement
ARCHITECTURE_STATEMENT_12 | simultaneous_statement
ARRAY_NATURE_DEFINITION_1 | unconstrained_nature_definition
ARRAY_NATURE_DEFINITION_2 | constrained_nature_definition
ARRAY_TYPE_DEFINITION_1 | unconstrained_array_definition
ARRAY_TYPE_DEFINITION_2 | constrained_array_definition
ASSERT_1 | condition * expression * expression
ASSERT_2 | condition * expression
ASSERT_3 | condition
ASSERTION_STM_1 | label_colon * assertion
ASSERTION_STM_2 | assertion

ASSOCIATION_ELE_1 | formal_part * actual_part
 ASSOCIATION_ELE_2 | actual_part
 ASSOCIATION_ELE_LIST | association_element list
 Attribute | label_colon * name
 ATTRIBUTE_DESIGNATOR | identifier
 Range | unit
 ATTRIBUTE_SPECIFICATION | attribute_designator * entity_specification * expression
 Base_literal | string
 Basic_identifier | string
 BASE_UNIT_DECLARATION | identifier
 BINDING_INDICATION_1 | entity_aspect * generic_map_aspect * port_map_aspect
 BINDING_INDICATION_2 | entity_aspect * generic_map_aspect
 BINDING_INDICATION_3 | entity_aspect * port_map_aspect
 BINDING_INDICATION_4 | generic_map_aspect * port_map_aspect
 BINDING_INDICATION_5 | entity_aspect
 BINDING_INDICATION_6 | port_map_aspect
 BINDING_INDICATION_7 | generic_map_aspect
 Bit_string_literal | string
 BLOCK_CONFIGURATION | block_specification * use_clause list * configuration_item list
 BLOCK_DECLARATIVE_ITEM_1 | subprogram_declaration
 BLOCK_DECLARATIVE_ITEM_2 | subprogram_body
 BLOCK_DECLARATIVE_ITEM_4 | package_declaration
 BLOCK_DECLARATIVE_ITEM_5 | package_body
 BLOCK_DECLARATIVE_ITEM_7 | type_declaration
 BLOCK_DECLARATIVE_ITEM_8 | subtype_declaration
 BLOCK_DECLARATIVE_ITEM_10 | constant_declaration
 BLOCK_DECLARATIVE_ITEM_11 | signal_declaration
 BLOCK_DECLARATIVE_ITEM_12 | variable_declaration
 BLOCK_DECLARATIVE_ITEM_13 | file_declaration
 BLOCK_DECLARATIVE_ITEM_14 | alias_declaration
 BLOCK_DECLARATIVE_ITEM_15 | component_declaration
 BLOCK_DECLARATIVE_ITEM_16 | attribute_declaration
 BLOCK_DECLARATIVE_ITEM_17 | attribute_specification
 BLOCK_DECLARATIVE_ITEM_18 | configuration_specification
 BLOCK_DECLARATIVE_ITEM_19 | disconnection_specification
 BLOCK_DECLARATIVE_ITEM_20 | use_clause
 BLOCK_DECLARATIVE_ITEM_21 | group_template_declaration
 BLOCK_DECLARATIVE_ITEM_22 | group_declaration
 BLOCK_DECLARATIVE_ITEM_23 | step_limit_specification
 BLOCK_DECLARATIVE_ITEM_24 | nature_declaration
 BLOCK_DECLARATIVE_ITEM_25 | subnature_declaration
 BLOCK_DECLARATIVE_ITEM_26 | quantity_declaration
 BLOCK_DECLARATIVE_ITEM_27 | terminal_declaration
 BLOCK_DECLARATIVE_PART | block_declarative_item list
 BLOCK_HEADER_1 | generic_clause * generic_map_aspect * port_clause * port_map_aspect

BLOCK_HEADER_2 | generic_clause * port_clause * port_map_aspect
 BLOCK_HEADER_3 | port_clause * port_map_aspect
 BLOCK_HEADER_4 | generic_clause * generic_map_aspect * port_clause
 BLOCK_HEADER_5 | generic_clause * port_clause
 BLOCK_HEADER_6 | port_clause
 BLOCK_HEADER_7 | generic_clause * generic_map_aspect
 BLOCK_HEADER_8 | generic_clause
 BLOCK_HEADER_9 | unit
 BLOCK_SPECIFICATION_1 | name
 BLOCK_SPECIFICATION_2 | identifier
 BLOCK_SPECIFICATION_3 | identifier * index_specification
 BLOCK_STATEMENT_1 | label_colon * expression * block_header * block_declarative_part *
 block_statement_part * identifier
 BLOCK_STATEMENT_2 | label_colon * block_header * block_declarative_part *
 block_statement_part * identifier
 BLOCK_STATEMENT_3 | label_colon * block_header * block_declarative_part *
 block_statement_part
 BLOCK_STATEMENT_4 | label_colon * expression * block_header * block_declarative_part *
 block_statement_part
 BLOCK_STATEMENT_PART | architecture_statement list
 BRANCH_QUANTITY_DECLARATION_1 | across_aspect * through_aspect * terminal_aspect
 BRANCH_QUANTITY_DECLARATION_2 | across_aspect * terminal_aspect
 BRANCH_QUANTITY_DECLARATION_3 | through_aspect * terminal_aspect
 BRANCH_QUANTITY_DECLARATION_4 | terminal_aspect
 BRANCH_QUANTITY_DECLARATION_5 | unit
 BREAK_ELEMENT_1 | break_selector_clause * name * expression
 BREAK_ELEMENT_2 | name * expression
 BREAK_SELECTOR_CLAUSE | name
 BREAK_STATEMENT_1 | label_colon * break_list * condition
 BREAK_STATEMENT_2 | label_colon * break_list
 BREAK_STATEMENT_3 | label_colon * condition
 BREAK_STATEMENT_4 | label_colon
 BREAK_STATEMENT_5 | break_list * condition
 BREAK_STATEMENT_6 | break_list
 BREAK_STATEMENT_7 | condition
 BREAK_STATEMENT_8 | unit
 BREAK_LIST | break_element list
 CASE_STATEMENT_1 | label_colon * expression * case_statement_alternative list * identifier
 CASE_STATEMENT_2 | expression * case_statement_alternative list * identifier
 CASE_STATEMENT_3 | expression * case_statement_alternative list
 CASE_STATEMENT_4 | label_colon * expression * case_statement_alternative list
 CASE_STATEMENT_ALTERNATIVE | choices * sequence_of_statements
 Character_literal | string
 String_literal | string
 CHOICE_1 | simple_expression

CHOICE_2 | discrete_range
CHOICE_3 | identifier
Others1 | unit
CHOICES | choice * choice list
COMPONENT_CONFIGURATION_1 | component_specification * binding_indication *
block_configuration
COMPONENT_CONFIGURATION_2 | component_specification * block_configuration
COMPONENT_CONFIGURATION_3 | component_specification
COMPONENT_CONFIGURATION_4 | component_specification * binding_indication
COMPONENT_DECLARATION_1 | identifier * generic_clause * port_clause * identifier
COMPONENT_DECLARATION_2 | identifier * port_clause * identifier
COMPONENT_DECLARATION_3 | identifier * generic_clause * identifier
COMPONENT_DECLARATION_4 | identifier * identifier
COMPONENT_DECLARATION_5 | identifier * generic_clause
COMPONENT_DECLARATION_6 | identifier
COMPONENT_DECLARATION_7 | identifier * generic_clause * port_clause
COMPONENT_DECLARATION_8 | identifier * port_clause
COMPONENT_INSTANTIATION_STATEMENT_1 | label_colon * instantiated_unit *
generic_map_aspect * port_map_aspect
COMPONENT_INSTANTIATION_STATEMENT_2 | label_colon * instantiated_unit *
port_map_aspect
COMPONENT_INSTANTIATION_STATEMENT_3 | label_colon * instantiated_unit
COMPONENT_INSTANTIATION_STATEMENT_4 | label_colon * instantiated_unit *
generic_map_aspect
COMPONENT_SPECIFICATION | instantiation_list * name
COMPOSITE_TYPE_DEFINITION_1 | array_type_definition
COMPOSITE_TYPE_DEFINITION_2 | record_type_definition
COMPOSITE_NATURE_DEFINITION_1 | array_nature_definition
COMPOSITE_NATURE_DEFINITION_2 | record_nature_definition
CONCURRENT_BREAK_STATEMENT_1 | label_colon * break_list * sensitivity_clause *
condition
CONCURRENT_BREAK_STATEMENT_2 | label_colon * break_list * condition
CONCURRENT_BREAK_STATEMENT_3 | label_colon * break_list * sensitivity_clause
CONCURRENT_BREAK_STATEMENT_4 | label_colon * break_list
CONCURRENT_BREAK_STATEMENT_5 | label_colon * sensitivity_clause * condition
CONCURRENT_BREAK_STATEMENT_6 | label_colon * condition
CONCURRENT_BREAK_STATEMENT_7 | label_colon * sensitivity_clause
CONCURRENT_BREAK_STATEMENT_8 | label_colon
CONCURRENT_BREAK_STATEMENT_9 | break_list * sensitivity_clause * condition
CONCURRENT_BREAK_STATEMENT_10 | break_list * condition
CONCURRENT_BREAK_STATEMENT_11 | break_list * sensitivity_clause
CONCURRENT_BREAK_STATEMENT_12 | break_list
CONCURRENT_BREAK_STATEMENT_13 | sensitivity_clause * condition
CONCURRENT_BREAK_STATEMENT_14 | condition
CONCURRENT_BREAK_STATEMENT_15 | sensitivity_clause

CONCURRENT_BREAK_STATEMENT_16 | unit
 CONCURRENT_ASSERTION_STATEMENT_1 | label_colon * assertion
 CONCURRENT_ASSERTION_STATEMENT_2 | assertion
 CONCURRENT_PROCEDURE_CALL_STATEMENT_1 | label_colon * procedure_call
 CONCURRENT_PROCEDURE_CALL_STATEMENT_2 | procedure_call
 CONCURRENT_SIGNAL_ASSIGNMENT_STATEMENT_1 | identifier *
 conditional_signal_assignment
 CONCURRENT_SIGNAL_ASSIGNMENT_STATEMENT_2 | conditional_signal_assignment
 CONCURRENT_SIGNAL_ASSIGNMENT_STATEMENT_3 | label_colon *
 conditional_signal_assignment
 CONCURRENT_SIGNAL_ASSIGNMENT_STATEMENT_4 | conditional_signal_assignment
 CONCURRENT_SIGNAL_ASSIGNMENT_STATEMENT_5 | label_colon *
 selected_signal_assignment
 CONCURRENT_SIGNAL_ASSIGNMENT_STATEMENT_6 | selected_signal_assignment
 CONDITION | expression
 CONDITION_CLAUSE | condition
 CONDITIONAL_SIGNAL_ASSIGNMENT_1 | target * opts * conditional_waveforms
 CONDITIONAL_SIGNAL_ASSIGNMENT_2 | target * conditional_waveforms
 CONDITIONAL_WAVEFORMS_1 | waveform * condition * conditional_waveforms
 CONDITIONAL_WAVEFORMS_2 | waveform * condition
 CONDITIONAL_WAVEFORMS_3 | waveform
 CONFIGURATION_DECLARATION_1 | identifier * name * configuration_declarative_part *
 block_configuration * identifier
 CONFIGURATION_DECLARATION_2 | identifier * name * configuration_declarative_part *
 block_configuration
 CONFIGURATION_DECLARATIVE_ITEM_1 | use_clause
 CONFIGURATION_DECLARATIVE_ITEM_2 | attribute_specification
 CONFIGURATION_DECLARATIVE_ITEM_3 | group_declaration
 CONFIGURATION_DECLARATIVE_PART | configuration_declarative_item list
 CONFIGURATION_ITEM_1 | block_configuration
 CONFIGURATION_ITEM_2 | component_configuration
 CONFIGURATION_SPECIFICATION | component_specification * binding_indication
 CONSTANT_DECLARATION_1 | identifier_list * subtype_indication * expression
 CONSTANT_DECLARATION_2 | identifier_list * subtype_indication
 CONSTRAINED_ARRAY_DEFINITION | index_constraint * subtype_indication
 CONSTRAINED_NATURE_DEFINITION | index_constraint * subnature_indication
 CONSTRAINT_1 | range_constraint
 CONSTRAINT_2 | index_constraint
 CONTEXT_CLAUSE | context_item list
 CONTEXT_ITEM_1 | library_clause
 CONTEXT_ITEM_2 | use_clause
 Real_literal | string
 Transport | unit
 DELAY_MECHANISM_2 | expression
 Inertial | unit

DESIGN_FILE | design_unit list
DESIGN_UNIT | context_clause * library_unit
DESIGNATOR_1 | identifier
DESIGNATOR_2 | string_literal
To | unit
Downto | unit
DISCONNECTION_SPECIFICATION | guarded_signal_specification * expression
DISCRETE_RANGE_1 | subtype_indication
DISCRETE_RANGE_2 | range_decl
ELEMENT_ASSOCIATION_1 | choices * expression
ELEMENT_ASSOCIATION_2 | expression
ELEMENT_DECLARATION | identifier_list * element_subtype_definition
ELEMENT_SUBTYPE_DEFINITION | subtype_indication
ELEMENT_SUBNATURE_DEFINITION | subnature_indication
ENTITY_ASPECT_1 | name * identifier
ENTITY_ASPECT_2 | name
Open2 | unit
Entity | unit
Architecture | unit
Configuration | unit
Procedure1 | unit
Function1 | unit
Package | unit
Type | unit
Subtype | unit
Constant | unit
Variable | unit
Component | unit
Label | unit
Signal | unit
Literal | unit
Units | unit
Group | unit
File | unit
Property | unit
Sequence | unit
ENTITY_CLASS_ENTRY | entity_class
ENTITY_CLASS_ENTRY_LIST | entity_class_entry * entity_class_entry list
ENTITY_DECLARATION_1 | identifier * entity_header * entity_declarative_part *
entity_statement_part * identifier
ENTITY_DECLARATION_2 | identifier * entity_header * entity_declarative_part * identifier
ENTITY_DECLARATION_3 | identifier * entity_header * entity_declarative_part
ENTITY_DECLARATION_4 | identifier * entity_header * entity_declarative_part *
entity_statement_part
ENTITY_DECLARATIVE_ITEM_1 | subprogram_declaration

ENTITY_DECLARATIVE_ITEM_2 | subprogram_body
ENTITY_DECLARATIVE_ITEM_4 | package_declaration
ENTITY_DECLARATIVE_ITEM_5 | package_body
ENTITY_DECLARATIVE_ITEM_7 | type_declaration
ENTITY_DECLARATIVE_ITEM_8 | subtype_declaration
ENTITY_DECLARATIVE_ITEM_10 | constant_declaration
ENTITY_DECLARATIVE_ITEM_11 | signal_declaration
ENTITY_DECLARATIVE_ITEM_12 | variable_declaration
ENTITY_DECLARATIVE_ITEM_13 | file_declaration
ENTITY_DECLARATIVE_ITEM_14 | alias_declaration
ENTITY_DECLARATIVE_ITEM_15 | attribute_declaration
ENTITY_DECLARATIVE_ITEM_16 | attribute_specification
ENTITY_DECLARATIVE_ITEM_17 | disconnection_specification
ENTITY_DECLARATIVE_ITEM_18 | use_clause
ENTITY_DECLARATIVE_ITEM_19 | group_template_declaration
ENTITY_DECLARATIVE_ITEM_20 | group_declaration
ENTITY_DECLARATIVE_ITEM_21 | step_limit_specification
ENTITY_DECLARATIVE_ITEM_22 | nature_declaration
ENTITY_DECLARATIVE_ITEM_23 | subnature_declaration
ENTITY_DECLARATIVE_ITEM_24 | quantity_declaration
ENTITY_DECLARATIVE_ITEM_25 | terminal_declaration
ENTITY_DECLARATIVE_PART | entity_declarative_item list
ENTITY_DESIGNATOR_1 | entity_tag * signatur
ENTITY_DESIGNATOR_2 | entity_tag
ENTITY_HEADER_1 | generic_clause * port_clause
ENTITY_HEADER_2 | port_clause
ENTITY_HEADER_3 | generic_clause
ENTITY_HEADER_4 | unit
ENTITY_NAME_LIST | entity_designator * entity_designator list
Others2 | unit
All1 | unit
ENTITY_SPECIFICATION | entity_name_list * entity_class
ENTITY_STATEMENT_1 | concurrent_assertion_statement
ENTITY_STATEMENT_2 | concurrent_procedure_call_statement
ENTITY_STATEMENT_3 | process_statement
ENTITY_STATEMENT_PART | entity_statement list
ENTITY_TAG_1 | identifier
ENTITY_TAG_2 | character_literal
ENTITY_TAG_3 | string_literal
ENUMERATION_LITERAL_1 | identifier
ENUMERATION_LITERAL_2 | character_literal
ENUMERATION_TYPE_DEFINITION | enumeration_literal * enumeration_literal list
EXIT_STATEMENT_1 | label_colon * identifier * condition
EXIT_STATEMENT_2 | identifier * condition
EXIT_STATEMENT_3 | condition

EXIT_STATEMENT_4 | label_colon * identifier
 EXIT_STATEMENT_5 | label_colon
 EXIT_STATEMENT_6 | identifier
 EXIT_STATEMENT_7 | label_colon * condition
 Exit | unit
 EXPRESSION_1 | primary
 EXPRESSION_3 | relation * (logical_operator * relation) list
 Extended_identifier | string
 FACTOR_1 | primary * primary
 FACTOR_2 | primary
 FILE_DECLARATION_1 | identifier_list * subtype_indication * file_open_information
 FILE_DECLARATION_2 | identifier_list * subtype_indication
 FILE_LOGICAL_NAME | expression
 FILE_OPEN_INFORMATION_1 | expression * file_logical_name
 FILE_OPEN_INFORMATION_2 | file_logical_name
 FILE_TYPE_DEFINITION | subtype_indication
 FORMAL_PARAMETER_LIST | interface_list
 FORMAL_PART_1 | identifier
 FORMAL_PART_2 | identifier * explicit_range
 FREE_QUANTITY_DECLARATION_1 | identifier_list * subtype_indication * expression
 FREE_QUANTITY_DECLARATION_2 | identifier_list * subtype_indication
 FULL_TYPE_DECLARATION | identifier * type_definition
 GENERATE_STATEMENT_1 | label_colon * generation_scheme * block_declarative_item list
 * architecture_statement list * identifier
 GENERATE_STATEMENT_2 | label_colon * generation_scheme * architecture_statement list
 * identifier
 GENERATE_STATEMENT_3 | label_colon * generation_scheme * block_declarative_item list
 * architecture_statement list
 GENERATE_STATEMENT_4 | label_colon * generation_scheme * architecture_statement list
 GENERATION_SCHEME_1 | parameter_specification
 GENERATION_SCHEME_2 | condition
 GENERIC_CLAUSE | generic_list
 GENERIC_LIST | interface_constant_declaration * interface_constant_declaration list
 GENERIC_MAP_ASPECT | association_list
 GROUP_CONSTITUENT_1 | name
 GROUP_CONSTITUENT_2 | character_literal
 GROUP_CONSTITUENT_LIST | group_constituent * group_constituent list
 GROUP_DECLARATION | label_colon * name * group_constituent_list
 GROUP_TEMPLATE_DECLARATION | identifier * entity_class_entry_list
 GUARDED_SIGNAL_SPECIFICATION | signal_list * name
 IDENTIFIER_1 | basic_identifier
 IDENTIFIER_2 | extended_identifier
 IDENTIFIER_LIST | identifier * identifier list
 IF_STATEMENT1 | condition * sequence_of_statements

IF_STATEMENT_1 | label_colon * condition * sequence_of_statements * if_statement1 list *
 sequence_of_statements * identifier
 IF_STATEMENT_2 | condition * sequence_of_statements * if_statement1 list *
 sequence_of_statements * identifier
 IF_STATEMENT_3 | label_colon * condition * sequence_of_statements * if_statement1 list *
 identifier
 IF_STATEMENT_4 | condition * sequence_of_statements * if_statement1 list * identifier
 IF_STATEMENT_5 | label_colon * condition * sequence_of_statements * if_statement1 list
 IF_STATEMENT_6 | condition * sequence_of_statements * if_statement1 list
 IF_STATEMENT_7 | label_colon * condition * sequence_of_statements * if_statement1 list *
 sequence_of_statements
 IF_STATEMENT_8 | condition * sequence_of_statements * if_statement1 list *
 sequence_of_statements
 INDEX_CONSTRAINT | discrete_range * discrete_range list
 INDEX_SPECIFICATION_1 | discrete_range
 INDEX_SPECIFICATION_2 | expression
 INDEX_SUBTYPE_DEFINITION | name
 INSTANTIATED_UNIT_1 | name
 INSTANTIATED_UNIT_2 | name * identifier
 INSTANTIATION_LIST | identifier * identifier list
 Others3 | unit
 All2 | unit
 Integer | string
 INTERFACE_CONSTANT_DECLARATION_1 | identifier_list * subtype_indication * expression
 INTERFACE_CONSTANT_DECLARATION_2 | identifier_list * subtype_indication
 INTERFACE_DECLARATION_1 | interface_constant_declaration
 INTERFACE_DECLARATION_2 | interface_signal_declaration
 INTERFACE_DECLARATION_3 | interface_variable_declaration
 INTERFACE_DECLARATION_4 | interface_file_declaration
 INTERFACE_DECLARATION_5 | interface_terminal_declaration
 INTERFACE_DECLARATION_6 | interface_quantity_declaration
 INTERFACE_ELEMENT | interface_declaration
 INTERFACE_FILE_DECLARATION | identifier_list * subtype_indication
 INTERFACE_LIST | interface_element * interface_element list
 INTERFACE_SIGNAL_LIST | interface_signal_declaration * interface_signal_declaration list
 INTERFACE_PORT_LIST | interface_port_declaration * interface_port_declaration list
 INTERFACE_QUANTITY_DECLARATION_1 | identifier_list * subtype_indication * expression
 INTERFACE_QUANTITY_DECLARATION_2 | identifier_list * subtype_indication
 INTERFACE_QUANTITY_DECLARATION_3 | unit
 INTERFACE_PORT_DECLARATION_1 | identifier_list * signal_mode * subtype_indication *
 expression
 INTERFACE_PORT_DECLARATION_2 | identifier_list * signal_mode * subtype_indication
 INTERFACE_PORT_DECLARATION_3 | identifier_list * subtype_indication * expression
 INTERFACE_PORT_DECLARATION_4 | identifier_list * subtype_indication
 INTERFACE_OBJECT_DECLARATION_1 | interface_constant_declaration

INTERFACE_OBJECT_DECLARATION_2 | interface_signal_declaration
INTERFACE_OBJECT_DECLARATION_3 | interface_variable_declaration
INTERFACE_OBJECT_DECLARATION_4 | interface_file_declaration

INTERFACE_SIGNAL_DECLARATION_1 | identifier_list * subtype_indication * expression
INTERFACE_SIGNAL_DECLARATION_2 | identifier_list * subtype_indication
INTERFACE_SIGNAL_DECLARATION_3 | identifier_list * signal_mode * subtype_indication * expression
INTERFACE_SIGNAL_DECLARATION_4 | identifier_list * signal_mode * subtype_indication
INTERFACE_TERMINAL_DECLARATION | identifier_list * subnature_indication
INTERFACE_VARIABLE_DECLARATION_1 | identifier_list * signal_mode * subtype_indication * expression
INTERFACE_VARIABLE_DECLARATION_2 | identifier_list * signal_mode * subtype_indication
INTERFACE_VARIABLE_DECLARATION_3 | identifier_list * subtype_indication * expression
INTERFACE_VARIABLE_DECLARATION_4 | identifier_list * subtype_indication
ITERATION_SCHEME_1 | condition
ITERATION_SCHEME_2 | parameter_specification
LIBRARY_CLAUSE | logical_name_list
LIBRARY_UNIT_1 | primary_unit
LIBRARY_UNIT_2 | secondary_unit
LITERAL_1 | numeric_literal
LITERAL_2 | enumeration_literal
LITERAL_3 | string_literal
LITERAL_4 | bit_string_literal
Null | unit
LOGICAL_NAME | identifier
LOGICAL_NAME_LIST | logical_name * logical_name list
And | unit
Or | unit
Nand | unit
Nor | unit
Xor | unit
Xnor | unit
LOOP_STATEMENT_1 | label_colon * iteration_scheme * sequence_of_statements * identifier
LOOP_STATEMENT_2 | label_colon * sequence_of_statements * identifier
LOOP_STATEMENT_3 | label_colon * iteration_scheme * sequence_of_statements
LOOP_STATEMENT_4 | label_colon * sequence_of_statements
LOOP_STATEMENT_5 | iteration_scheme * sequence_of_statements
LOOP_STATEMENT_6 | sequence_of_statements
LOOP_STATEMENT_7 | iteration_scheme * sequence_of_statements * identifier
LOOP_STATEMENT_8 | sequence_of_statements * identifier
In1 | unit
Out1 | unit
Inout | unit
Buffer | unit

Linkage | unit
Mult | unit
Div | unit
Mod | unit
Rem | unit
NAME_9 | identifier * name_part list
NAME_10 | string_literal * name_part list
NAME_PART_1 | selected_name_part
NAME_PART_2 | function_call_or_indexed_name_part
NAME_PART_3 | slice_name_part
NAME_PART_4 | attribute_name_part
SELECTED_NAME | identifier * suffix list
FCINP | actual_parameter_part
SELECTED_NAME_PART | suffix list
SLICE_NAME_PART | discrete_range
ATTRIBUTE_NAME_PART_1 | signatur * attribute_designator * expression
ATTRIBUTE_NAME_PART_2 | signatur * attribute_designator
ATTRIBUTE_NAME_PART_3 | attribute_designator * expression
ATTRIBUTE_NAME_PART_4 | attribute_designator
NEXT_STATEMENT_1 | label_colon * identifier * condition
NEXT_STATEMENT_2 | label_colon * condition
NEXT_STATEMENT_3 | condition
NEXT_STATEMENT_4 | label_colon
NEXT_STATEMENT_5 | label_colon * identifier
NEXT_STATEMENT_6 | unit
NEXT_STATEMENT_7 | identifier
NEXT_STATEMENT_8 | identifier * condition
NATURE_DECLARATION | identifier * nature_definition
NATURE_DEFINITION_1 | scalar_nature_definition
NATURE_DEFINITION_2 | composite_nature_definition
NATURE_ELEMENT_DECLARATION | identifier_list * element_subnature_definition
NUMERIC_LITERAL_1 | abstract_literal
NUMERIC_LITERAL_2 | physical_literal
OBJECT_DECLARATION_1 | constant_declaration
OBJECT_DECLARATION_2 | signal_declaration
OBJECT_DECLARATION_3 | variable_declaration
OBJECT_DECLARATION_4 | file_declaration
OPTS_1 | delay_mechanism
OPTS_2 | unit
PACKAGE_BODY_1 | identifier * package_body_declarative_part * identifier
PACKAGE_BODY_2 | identifier * package_body_declarative_part
PACKAGE_BODY_DECLARATIVE_ITEM_1 | subprogram_declaration
PACKAGE_BODY_DECLARATIVE_ITEM_2 | subprogram_body
PACKAGE_BODY_DECLARATIVE_ITEM_3 | type_declaration
PACKAGE_BODY_DECLARATIVE_ITEM_4 | subtype_declaration

PACKAGE_BODY_DECLARATIVE_ITEM_5 | constant_declaration
PACKAGE_BODY_DECLARATIVE_ITEM_6 | variable_declaration
PACKAGE_BODY_DECLARATIVE_ITEM_7 | file_declaration
PACKAGE_BODY_DECLARATIVE_ITEM_8 | alias_declaration
PACKAGE_BODY_DECLARATIVE_ITEM_9 | use_clause
PACKAGE_BODY_DECLARATIVE_ITEM_10 | group_template_declaration
PACKAGE_BODY_DECLARATIVE_ITEM_11 | group_declaration
PACKAGE_BODY_DECLARATIVE_PART | package_body_declarative_item list
PACKAGE_DECLARATION_1 | identifier * package_declarative_part * identifier
PACKAGE_DECLARATION_2 | identifier * package_declarative_part
PACKAGE_DECLARATIVE_ITEM_1 | subprogram_declaration
PACKAGE_DECLARATIVE_ITEM_2 | subprogram_body
PACKAGE_DECLARATIVE_ITEM_3 | type_declaration
PACKAGE_DECLARATIVE_ITEM_4 | subtype_declaration
PACKAGE_DECLARATIVE_ITEM_5 | constant_declaration
PACKAGE_DECLARATIVE_ITEM_6 | signal_declaration
PACKAGE_DECLARATIVE_ITEM_7 | variable_declaration
PACKAGE_DECLARATIVE_ITEM_8 | file_declaration
PACKAGE_DECLARATIVE_ITEM_9 | alias_declaration
PACKAGE_DECLARATIVE_ITEM_10 | component_declaration
PACKAGE_DECLARATIVE_ITEM_11 | attribute_declaration
PACKAGE_DECLARATIVE_ITEM_12 | attribute_specification
PACKAGE_DECLARATIVE_ITEM_13 | disconnection_specification
PACKAGE_DECLARATIVE_ITEM_14 | use_clause
PACKAGE_DECLARATIVE_ITEM_15 | group_template_declaration
PACKAGE_DECLARATIVE_ITEM_16 | group_declaration
PACKAGE_DECLARATIVE_ITEM_17 | nature_declaration
PACKAGE_DECLARATIVE_ITEM_18 | subnature_declaration
PACKAGE_DECLARATIVE_ITEM_19 | terminal_declaration
PACKAGE_DECLARATIVE_PART | package_declarative_item list
PARAMETER_SPECIFICATION | identifier * discrete_range
PHYSICAL_LITERAL_1 | abstract_literal * identifier
PHYSICAL_LITERAL_2 | identifier
PHYSICAL_TYPE_DEFINITION_1 | range_constraint * base_unit_declaration *
secondary_unit_declaration list
PHYSICAL_TYPE_DEFINITION_2 | range_constraint * base_unit_declaration *
secondary_unit_declaration list * identifier
PORT_CLAUSE | port_list
PORT_LIST | interface_port_list
PORT_MAP_ASPECT | association_list
PRIMARY_1 | literal
PRIMARY_2 | qualified_expression
PRIMARY_3 | expression
PRIMARY_4 | allocator
PRIMARY_5 | aggregate

PRIMARY_6 | name
 PRIMARY_UNIT_1 | entity_declaration
 PRIMARY_UNIT_2 | configuration_declaration
 PRIMARY_UNIT_3 | package_declaration
 PROCEDURAL_DECLARATIVE_ITEM_1 | subprogram_declaration
 PROCEDURAL_DECLARATIVE_ITEM_2 | subprogram_body
 PROCEDURAL_DECLARATIVE_ITEM_3 | type_declaration
 PROCEDURAL_DECLARATIVE_ITEM_4 | subtype_declaration
 PROCEDURAL_DECLARATIVE_ITEM_5 | constant_declaration
 PROCEDURAL_DECLARATIVE_ITEM_6 | variable_declaration
 PROCEDURAL_DECLARATIVE_ITEM_7 | alias_declaration
 PROCEDURAL_DECLARATIVE_ITEM_8 | attribute_declaration
 PROCEDURAL_DECLARATIVE_ITEM_9 | attribute_specification
 PROCEDURAL_DECLARATIVE_ITEM_10 | use_clause
 PROCEDURAL_DECLARATIVE_ITEM_11 | group_template_declaration
 PROCEDURAL_DECLARATIVE_ITEM_12 | group_declaration
 PROCEDURAL_DECLARATIVE_PART | procedural_declarative_item list
 PROCEDURAL_STATEMENT_PART | sequential_statement list
 PROCEDURE_CALL_1 | selected_name
 PROCEDURE_CALL_2 | selected_name * actual_parameter_part
 PROCEDURE_CALL_STATEMENT_1 | label_colon * procedure_call
 PROCEDURE_CALL_STATEMENT_2 | procedure_call
 PROCESS_DECLARATIVE_ITEM_1 | subprogram_declaration
 PROCESS_DECLARATIVE_ITEM_2 | subprogram_body
 PROCESS_DECLARATIVE_ITEM_7 | type_declaration
 PROCESS_DECLARATIVE_ITEM_8 | subtype_declaration
 PROCESS_DECLARATIVE_ITEM_9 | constant_declaration
 PROCESS_DECLARATIVE_ITEM_10 | variable_declaration
 PROCESS_DECLARATIVE_ITEM_11 | file_declaration
 PROCESS_DECLARATIVE_ITEM_12 | alias_declaration
 PROCESS_DECLARATIVE_ITEM_13 | attribute_declaration
 PROCESS_DECLARATIVE_ITEM_14 | attribute_specification
 PROCESS_DECLARATIVE_ITEM_15 | use_clause
 PROCESS_DECLARATIVE_ITEM_16 | group_template_declaration
 PROCESS_DECLARATIVE_ITEM_17 | group_declaration
 PROCESS_DECLARATIVE_PART | process_declarative_item list
 PROCESS_STATEMENT_2 | label_colon * sensitivity_list * process_declarative_part *
 process_statement_part * identifier
 PROCESS_STATEMENT_1 | sensitivity_list * process_declarative_part *
 process_statement_part * identifier
 PROCESS_STATEMENT_4 | label_colon * process_declarative_part * process_statement_part
 * identifier
 PROCESS_STATEMENT_3 | process_declarative_part * process_statement_part * identifier
 PROCESS_STATEMENT_6 | label_colon * process_declarative_part *
 process_statement_part

PROCESS_STATEMENT_5 | process_declarative_part * process_statement_part
 PROCESS_STATEMENT_8 | label_colon * sensitivity_list * process_declarative_part *
 process_statement_part
 PROCESS_STATEMENT_7 | sensitivity_list * process_declarative_part *
 process_statement_part
 PROCESS_STATEMENT_PART | sequential_statement list
 QUALIFIED_EXPRESSION_1 | subtype_indication * aggregate
 QUALIFIED_EXPRESSION_2 | subtype_indication * expression
 QUANTITY_DECLARATION_1 | free_quantity_declaration
 QUANTITY_DECLARATION_2 | branch_quantity_declaration
 QUANTITY_DECLARATION_3 | source_quantity_declaration
 QUANTITY_LIST_1 | name * name list
 QUANTITY_LIST_2 | unit
 QUANTITY_LIST_3 | unit
 QUANTITY_SPECIFICATION | quantity_list * name
 RANGE_DECL_1 | explicit_range
 RANGE_DECL_2 | name
 EXPLICIT_RANGE_1 | simple_expression * direction * simple_expression
 EXPLICIT_RANGE_2 | simple_expression
 RANGE_CONSTRAINT | range_decl
 RECORD_NATURE_DEFINITION_1 | nature_element_declaration *
 nature_element_declaration list * identifier
 RECORD_NATURE_DEFINITION_2 | nature_element_declaration *
 nature_element_declaration list
 RECORD_TYPE_DEFINITION_1 | element_declaration * element_declaration list * identifier
 RECORD_TYPE_DEFINITION_2 | element_declaration * element_declaration list
 RELATION_1 | shift_expression * relational_operator * shift_expression
 RELATION_2 | shift_expression
 Eq | unit
 Neq | unit
 Gt | unit
 Lt | unit
 Ge | unit
 Le | unit
 REPORT_STATEMENT_1 | expression * expression
 REPORT_STATEMENT_2 | label_colon * expression
 REPORT_STATEMENT_3 | label_colon * expression * expression
 REPORT_STATEMENT_4 | expression
 RETURN_STATEMENT_1 | label_colon * expression
 RETURN_STATEMENT_2 | expression
 RETURN_STATEMENT_3 | unit
 RETURN_STATEMENT_4 | label_colon
 SCALAR_NATURE_DEFINITION | name * name * name
 SCALAR_TYPE_DEFINITION_1 | enumeration_type_definition
 SCALAR_TYPE_DEFINITION_2 | range_constraint

SCALAR_TYPE_DEFINITION_3 | physical_type_definition
SECONDARY_UNIT_1 | architecture_body
SECONDARY_UNIT_2 | package_body
SECONDARY_UNIT_DECLARATION | identifier * physical_literal
EX_WHEN_CHOICES | expression * choices
SELECTED_SIGNAL_ASSIGNMENT | expression * target * opts * selected_waveforms
WAVE_WHEN_CHOICES | waveform * choices
SELECTED_WAVEFORMS | waveform * choices * wave_when_choices list
SENSITIVITY_CLAUSE | sensitivity_list
SENSITIVITY_LIST | name * name list
SEQUENCE_OF_STATEMENTS | sequential_statement list
SEQUENTIAL_STATEMENT_1 | wait_statement
SEQUENTIAL_STATEMENT_2 | assertion_statement
SEQUENTIAL_STATEMENT_3 | report_statement
SEQUENTIAL_STATEMENT_4 | signal_assignment_statement
SEQUENTIAL_STATEMENT_5 | variable_assignment_statement
SEQUENTIAL_STATEMENT_6 | procedure_call_statement
SEQUENTIAL_STATEMENT_7 | if_statement
SEQUENTIAL_STATEMENT_8 | case_statement
SEQUENTIAL_STATEMENT_9 | loop_statement
SEQUENTIAL_STATEMENT_10 | next_statement
SEQUENTIAL_STATEMENT_11 | exit_statement
SEQUENTIAL_STATEMENT_12 | return_statement
SEQUENTIAL_STATEMENT_13 | label_colon
SEQUENTIAL_STATEMENT_14 | unit
SEQUENTIAL_STATEMENT_15 | break_statement
SHIFT_EXPRESSION_1 | simple_expression * shift_operator * simple_expression
SHIFT_EXPRESSION_2 | simple_expression
Sll | unit
Srl | unit
Sla | unit
Sra | unit
Rol | unit
Ror | unit
SIGNAL_ASSIGNMENT_STATEMENT_1 | label_colon * target * delay_mechanism * waveform
SIGNAL_ASSIGNMENT_STATEMENT_2 | target * delay_mechanism * waveform
SIGNAL_ASSIGNMENT_STATEMENT_3 | target * waveform
SIGNAL_ASSIGNMENT_STATEMENT_4 | label_colon * target * waveform
SIGNAL_DECLARATION_1 | identifier_list * subtype_indication * signal_kind * expression
SIGNAL_DECLARATION_2 | identifier_list * subtype_indication * expression
SIGNAL_DECLARATION_3 | identifier_list * subtype_indication
SIGNAL_DECLARATION_4 | identifier_list * subtype_indication * signal_kind
Register | unit
Bus | unit
SIGNAL_LIST_1 | name * name list

SIGNAL_LIST_2 | unit
 SIGNAL_LIST_3 | unit
 SIGNATURE_1 | name * name list * name
 SIGNATURE_2 | name
 SIGNATURE_3 | unit
 SIGNATURE_4 | name * name list
 ADDING_OPERATOR_TERM | adding_operator * term
 SIMPLE_EXPRESSION | term * adding_operator_term list
 SIMPLE_SIMULTANEOUS_STATEMENT_1 | label_colon * simple_expression *
 simple_expression * tolerance_aspect
 SIMPLE_SIMULTANEOUS_STATEMENT_2 | simple_expression * simple_expression *
 tolerance_aspect
 SIMPLE_SIMULTANEOUS_STATEMENT_3 | simple_expression * simple_expression
 SIMPLE_SIMULTANEOUS_STATEMENT_4 | label_colon * simple_expression *
 simple_expression
 SIMULTANEOUS_ALTERNATIVE | choices * simultaneous_statement_part
 SIMULTANEOUS_CASE_STATEMENT_1 | label_colon * expression * simultaneous_alternative
 * simultaneous_alternative list * identifier
 SIMULTANEOUS_CASE_STATEMENT_2 | expression * simultaneous_alternative *
 simultaneous_alternative list * identifier
 SIMULTANEOUS_CASE_STATEMENT_3 | expression * simultaneous_alternative *
 simultaneous_alternative list
 SIMULTANEOUS_CASE_STATEMENT_4 | label_colon * expression * simultaneous_alternative
 * simultaneous_alternative list
 CONDITION_SIMULTANEOUS_STATEMENT_PART | condition *
 simultaneous_statement_part
 SIMULTANEOUS_IF_STATEMENT_1 | label_colon * condition * simultaneous_statement_part *
 condition_simultaneous_statement_part list * simultaneous_statement_part * identifier
 SIMULTANEOUS_IF_STATEMENT_2 | condition * simultaneous_statement_part *
 condition_simultaneous_statement_part list * simultaneous_statement_part * identifier
 SIMULTANEOUS_IF_STATEMENT_3 | label_colon * condition * simultaneous_statement_part
 * condition_simultaneous_statement_part list * identifier
 SIMULTANEOUS_IF_STATEMENT_4 | condition * simultaneous_statement_part *
 condition_simultaneous_statement_part list * identifier
 SIMULTANEOUS_IF_STATEMENT_5 | label_colon * condition * simultaneous_statement_part
 * condition_simultaneous_statement_part list
 SIMULTANEOUS_IF_STATEMENT_6 | condition * simultaneous_statement_part *
 condition_simultaneous_statement_part list
 SIMULTANEOUS_IF_STATEMENT_7 | label_colon * condition * simultaneous_statement_part
 * condition_simultaneous_statement_part list * simultaneous_statement_part
 SIMULTANEOUS_IF_STATEMENT_8 | condition * simultaneous_statement_part *
 condition_simultaneous_statement_part list * simultaneous_statement_part
 SIMULTANEOUS_PROCEDURAL_STATEMENT_1 | label_colon * procedural_declarative_part
 * procedural_statement_part * identifier

SIMULTANEOUS_PROCEDURAL_STATEMENT_2 | procedural_declarative_part *
procedural_statement_part * identifier
SIMULTANEOUS_PROCEDURAL_STATEMENT_3 | procedural_declarative_part *
procedural_statement_part
SIMULTANEOUS_PROCEDURAL_STATEMENT_4 | label_colon * procedural_declarative_part
* procedural_statement_part
SIMULTANEOUS_STATEMENT_1 | simple_simultaneous_statement
SIMULTANEOUS_STATEMENT_2 | simultaneous_if_statement
SIMULTANEOUS_STATEMENT_3 | simultaneous_case_statement
SIMULTANEOUS_STATEMENT_4 | simultaneous_procedural_statement
SIMULTANEOUS_STATEMENT_5 | label_colon
SIMULTANEOUS_STATEMENT_PART | simultaneous_statement list
SOURCE_ASPECT_1 | simple_expression * simple_expression
SOURCE_ASPECT_2 | simple_expression
SOURCE_QUANTITY_DECLARATION | identifier_list * subtype_indication * source_aspect
STEP_LIMIT_SPECIFICATION | quantity_specification * expression
SUBNATURE_DECLARATION | identifier * subnature_indication
SUBNATURE_INDICATION_1 | name * index_constraint * expression * expression
SUBNATURE_INDICATION_2 | name * expression * expression
SUBNATURE_INDICATION_3 | name
SUBNATURE_INDICATION_4 | name * index_constraint
SUBPROGRAM_BODY_1 | subprogram_specification * subprogram_declarative_part *
subprogram_statement_part * subprogram_kind * designator
SUBPROGRAM_BODY_2 | subprogram_specification * subprogram_declarative_part *
subprogram_statement_part * designator
SUBPROGRAM_BODY_3 | subprogram_specification * subprogram_declarative_part *
subprogram_statement_part
SUBPROGRAM_BODY_4 | subprogram_specification * subprogram_declarative_part *
subprogram_statement_part * subprogram_kind
SUBPROGRAM_DECLARATION | subprogram_specification
SUBPROGRAM_DECLARATIVE_ITEM_1 | subprogram_declaration
SUBPROGRAM_DECLARATIVE_ITEM_2 | subprogram_body
SUBPROGRAM_DECLARATIVE_ITEM_7 | type_declaration
SUBPROGRAM_DECLARATIVE_ITEM_8 | subtype_declaration
SUBPROGRAM_DECLARATIVE_ITEM_9 | constant_declaration
SUBPROGRAM_DECLARATIVE_ITEM_10 | variable_declaration
SUBPROGRAM_DECLARATIVE_ITEM_11 | file_declaration
SUBPROGRAM_DECLARATIVE_ITEM_12 | alias_declaration
SUBPROGRAM_DECLARATIVE_ITEM_13 | attribute_declaration
SUBPROGRAM_DECLARATIVE_ITEM_14 | attribute_specification
SUBPROGRAM_DECLARATIVE_ITEM_15 | use_clause
SUBPROGRAM_DECLARATIVE_ITEM_16 | group_template_declaration
SUBPROGRAM_DECLARATIVE_ITEM_17 | group_declaration
SUBPROGRAM_DECLARATIVE_PART | subprogram_declarative_item list
Procedure | unit

Function | unit
 SUBPROGRAM_SPECIFICATION_1 | procedure_specification
 SUBPROGRAM_SPECIFICATION_2 | function_specification
 PROCEDURE_SPECIFICATION_1 | designator * formal_parameter_list
 PROCEDURE_SPECIFICATION_2 | designator
 FUNCTION_SPECIFICATION_1 | designator * formal_parameter_list * subtype_indication
 FUNCTION_SPECIFICATION_2 | designator * subtype_indication
 SUBPROGRAM_STATEMENT_PART | sequential_statement list
 SUBTYPE_DECLARATION | identifier * subtype_indication
 SUBTYPE_INDICATION_1 | selected_name * selected_name * constraint * tolerance_aspect
 SUBTYPE_INDICATION_2 | selected_name * constraint * tolerance_aspect
 SUBTYPE_INDICATION_3 | selected_name * selected_name * tolerance_aspect
 SUBTYPE_INDICATION_4 | selected_name * tolerance_aspect
 SUBTYPE_INDICATION_5 | selected_name * selected_name
 SUBTYPE_INDICATION_6 | selected_name
 SUBTYPE_INDICATION_7 | selected_name * selected_name * constraint
 SUBTYPE_INDICATION_8 | selected_name * constraint
 SUFFIX_1 | identifier
 SUFFIX_2 | unit
 SUFFIX_3 | character_literal
 SUFFIX_4 | string_literal
 TARGET_1 | name
 TARGET_2 | aggregate
 MULTIPLYING_OPERATOR_FACTOR | multiplying_operator * factor
 TERM | factor * multiplying_operator_factor list
 TERMINAL_ASPECT_1 | name * name
 TERMINAL_ASPECT_2 | name
 TERMINAL_DECLARATION | identifier_list * subnature_indication
 THROUGH_ASPECT_1 | identifier_list * tolerance_aspect * expression
 THROUGH_ASPECT_2 | identifier_list * expression
 THROUGH_ASPECT_3 | identifier_list
 THROUGH_ASPECT_4 | identifier_list * tolerance_aspect
 TIMEOUT_CLAUSE | expression
 TOLERANCE_ASPECT | expression
 TYPE_DECLARATION_1 | identifier * type_definition
 TYPE_DECLARATION_2 | identifier
 TYPE_DEFINITION_1 | scalar_type_definition
 TYPE_DEFINITION_2 | composite_type_definition
 TYPE_DEFINITION_3 | access_type_definition
 TYPE_DEFINITION_4 | file_type_definition
 UNCONSTRAINED_ARRAY_DEFINITION | index_subtype_definition *
 index_subtype_definition list * subtype_indication
 UNCONSTRAINED_NATURE_DEFINITION | index_subtype_definition *
 index_subtype_definition list * subnature_indication
 USE_CLAUSE | selected_name * selected_name list

VARIABLE_ASSIGNMENT_STATEMENT_1 | label_colon * target * expression
VARIABLE_ASSIGNMENT_STATEMENT_2 | target * expression
VARIABLE_DECLARATION_1 | identifier_list * subtype_indication * expression
VARIABLE_DECLARATION_2 | identifier_list * subtype_indication
WAIT_STATEMENT_1 | condition_clause * timeout_clause
WAIT_STATEMENT_2 | label_colon * condition_clause * timeout_clause
WAIT_STATEMENT_3 | sensitivity_clause * condition_clause * timeout_clause
WAIT_STATEMENT_4 | label_colon * sensitivity_clause * condition_clause * timeout_clause
WAIT_STATEMENT_5 | timeout_clause
WAIT_STATEMENT_6 | label_colon * timeout_clause
WAIT_STATEMENT_7 | sensitivity_clause * timeout_clause
WAIT_STATEMENT_8 | label_colon * sensitivity_clause * timeout_clause
WAIT_STATEMENT_9 | label_colon
WAIT_STATEMENT_10 | sensitivity_clause
WAIT_STATEMENT_11 | label_colon * sensitivity_clause
WAIT_STATEMENT_12 | condition_clause
WAIT_STATEMENT_13 | label_colon * condition_clause
WAIT_STATEMENT_14 | sensitivity_clause * condition_clause
WAIT_STATEMENT_15 | label_colon * sensitivity_clause * condition_clause
WAIT_STATEMENT_16 | unit
WAVEFORM | waveform_element * waveform_element list
Unaffected1 | unit
WAVEFORM_ELEMENT_1 | expression * expression
WAVEFORM_ELEMENT_2 | expression