

SECTION NAME	ID	RULE TEXT	POS	NEG	COMMENTARY
AADL Specifications	p41n1	(N1) An AADL specification has one global namespace. The package and property set identifiers reside in this space and	0	0	Checked by DFS during processing package nodes
AADL Specifications	p41n2	(N2) These package and property set identifiers qualify the names of individual elements contained in them when they are	0	0	0
AADL Specifications	p41n3	(N3) Package declarations represent labeled namespaces for component type, component implementation, feature group	0	0	0
AADL Specifications	p41n4	(N4) Property set declarations represent labeled namespaces for property type and property definition declarations.	0	0	0
AADL Specifications	p41n5	(N5) Packages and property sets may be separately stored. Those packages and property sets are considered to be part of	0	0	Provided by parser
AADL Specifications	p41n6	(N6) Defining identifiers in AADL must not be one of the reserved words of the language (see Section 15.7).	0	0	Provided by parser
AADL Specifications	p41n7	(N7) The AADL identifiers and reserved words can be in upper or lower case (or a mixture of the two) (see Section 15).	0	0	Provided by realization of AADLIdentifier class
AADL Specifications	p41n8	(N8) The AADL does not require that an identifier be declared before it is referenced.	0	0	0
Packages	p42n1	(N1) A defining package name consists of a sequence of one or more package identifiers separated by a double colon (e.g.,	0	0	Checked by counting private and public package declarations in DFS during processing package nodes
Packages	p42n2	(N2) The public and private section of a package may be declared in separate package declarations; these two declarations	0	0	Provided by parser
Packages	p42n3	(N3) Associated with every package is a package namespace that contains the names for all the elements defined within the	0	0	0
Packages	p42n4	(N4) The package namespace is divided into a public section and a private section. Items declared in the public section can	0	0	0
Packages	p42n5	(N5) The reference to an item declared in another package must be an item name qualified with a package name separated	0	0	Can be checked after all possible references are known
Packages	p42n6	(N6) The reference to a property other than predeclared properties must be an property name qualified with a property set	0	0	Can be checked after all possible references are known
Packages	p42n7	(N7) The package name in an import_declaration must exist in the global name space.	0	0	Checked by DFS during processing package nodes - imports
Packages	p42n8	(N8) The property set identifier in an import_declaration must exist in the global name space.	0	0	Checked by DFS during processing package nodes - imports
Packages	p42n9	(N9) Items declared in the private section of the package can only be referenced from within the private section of the package	0	0	Can be checked after all possible references are known
Packages	p42n10	(N10) If the qualifying package identifier of a qualified reference is missing, the referenced component classifier, feature group	0	0	0
Packages	p42n11	(N11) The package name referenced in an alias_declaration must exist in the global namespace and must be listed in the	0	0	Checked by DFS during processing package nodes - package aliases
Packages	p42n12	(N12) The classifier referenced by the alias_declaration must exist in the name space of the public section of the package	0	0	Checked by DFS during processing package nodes - classifier aliases
Packages	p42n13	(N13) The classifier referenced by the alias_declaration must refer to a component type or a feature group type.	0	0	Provided by parser
Packages	p42n14	(N14) The defining identifier of an alias_declaration must be unique in the namespace of the package containing the alias	0	0	Checked by DFS during processing package nodes - package and classifier aliases
Packages	p42n15	(N15) The alias_declaration makes the publicly visible identifier of classifiers declared in another package accessible in the	0	0	0
Packages	p42n16	(N16) If the alias_declaration renames all publicly visible identifiers of component types and feature group types by naming	0	0	0
Packages	p42n17	(N17) The identifiers introduced by the alias_declaration are only accessible within the package. When declared in the public	0	0	Not compatible with current realization of N14 check (alias ids == component ids), not all possible references are known
Packages	p42n18	(N18) The alias declared for a component type can be used instead of a qualified component type in a reference to a component	0	0	0
Packages	p42i1	(L1) The defining package name following the reserved word end must be identical to the defining package name following	0	0	Provided by parser
Packages	p42i2	(L2) For each package there may be at most one public section declaration and one private section declaration. These two	0	0	Checked with p42n1
Packages	p42i3	(L3) A component implementation may be declared in both the public and private part of a package. In that case the declaration	0	0	Should be checked in component implementations
Packages	p42i4	(L4) The component category in an alias declaration must match the category of the referenced component type.	0	0	0
Component Types	p43n1	(N1) The defining identifier for a component type must be unique in the namespace of the package within which it is declared	0	0	Checked when creating local namespaces of the packages
Component Types	p43n2	(N2) Each component type has a local namespace for defining identifiers of prototypes, features, modes, mode transition	0	0	0
Component Types	p43n3	(N3) The component type identifier of the ancestor in a component type extension, i.e., that appears after the reserved w	0	0	Checked by DFS for each component type node
Component Types	p43n4	(N4) When a component type extends another component type, a component type namespace includes all the identifiers	0	0	0
Component Types	p43n5	(N5) A component type that extends another component type does not include the identifiers of the implementations of its	0	0	0
Component Types	p43n6	(N6) The defining identifier of a feature, flow specification, mode, mode transition, or prototype must be unique in the name	0	0	0
Component Types	p43n7	(N7) The refinement identifier of a feature, flow specification, or prototype refinement refers to the closest refinement or t	0	0	0
Component Types	p43n8	(N8) The prototypes referenced by prototype binding declarations must exist in the local namespace of the component type	0	0	0
Component Types	p43n9	(N9) Mode transitions declared in the component type may not refer to event or event data ports of subcomponents.	0	0	0
Component Types	p43i1	(L1) The defining identifier following the reserved word end must be identical to the defining identifier that appears after t	0	0	Provided by parser
Component Types	p43i2	(L2) The prototypes, features, flows, modes, and properties subclauses are optional. If a subclause is present but empty,	0	0	Provided by parser(kinda, error is - "No viable alternative")
Component Types	p43i3	(L3) The category of the component type being extended must match the category of the extending component type, i.e.,	0	0	Checked by DFS for each component type node
Component Types	p43i4	(L4) The classifier being extended in a component type extension may include prototype bindings. There must be at most	0	0	0
Component Types	p43i5	(L5) A component type must not contain both a requires_modes_subclause and a modes_subclause.	0	0	Provided by parser(kinda, error is - extraneous input 'requires' expecting {'ANNEX', 'END', 'PROPERTIES', 'IDENTIFIER'})
Component Types	p43i6	(L6) If the extended component type and an ancestor component type in the extends hierarchy contain modes subclauses	0	0	0
Component Implementation	p44n1	(N1) A component implementation name consists of a component type identifier and a component implementation identifier	0	0	0
Component Implementation	p44n2	(N2) The defining identifier of the component implementation must be unique within the local namespace of the component	0	0	0
Component Implementation	p44n3	(N3) Every component implementation defines a local namespace for all defining identifiers of prototypes, subcomponents	0	0	0
Component Implementation	p44n4	(N4) This local namespace inherits the namespace of the associated component type, i.e., defining identifiers must be un	0	0	0
Component Implementation	p44n5	(N5) Refinement identifiers of features must exist in the namespace of the associated component type or one of the component	0	0	0
Component Implementation	p44n6	(N6) In a component implementation extension, the component type identifier of the component implementation being ex	0	0	0
Component Implementation	p44n7	(N7) When a component implementation extends another component implementation, the local namespace of the extens	0	0	0

Component Implementation	p44n8	(N8) Within the scope of the component implementation, subcomponent declarations, connections, subprogram call sequ	0	0	0
Component Implementation	p44n9	(N9) The prototype referenced by the prototype binding declaration must exist in the local namespace of the component	0	0	0
Component Implementation	p44i1	(L1) The pair of identifiers separated by a dot (вЪНЪ.вЪК) following the reserved word end must be identical to the pair of	0	0	0
Component Implementation	p44i2	(L2) The prototypes, subcomponents, connections, calls, flows, modes, and properties subclauses are optional. If they ar	0	0	0
Component Implementation	p44i3	(L3) The category of the component implementation must be identical to the category of the component type for which th	0	0	0
Component Implementation	p44i4	(L4) If the component implementation extends another component implementation, the category of both must match, i.e.,	0	0	0
Component Implementation	p44i5	(L5) The classifier being extended in a component implementation extension may include prototype bindings. There mus	0	0	0
Component Implementation	p44i6	(L6) If the component type of the component implementation contains a requires_modes_subclause then the component	0	0	0
Component Implementation	p44i7	(L7) If modes are declared in the component type, then modes cannot be declared in component implementations.	0	0	0
Component Implementation	p44i8	(L8) If modes or mode transitions are declared in the component type, then mode transitions can be added in the compo	0	0	0
Component Implementation	p44i9	(L9) The category of a subcomponent being refined must match the category of the refining subcomponent declaration, i	0	0	0
Component Implementation	p44i10	(L10) For all other refinement declarations the categories must match (see the respective sections).	0	0	0
Component Implementation	p44i11	(L11) Component implementations and component implementation extensions must not refine prototypes declared in a c	0	0	0
Subcomponents	p45n1	(N1) The defining identifier of a subcomponent declaration placed in a component implementation must be unique within	0	0	0
Subcomponents	p45n2	(N2) The defining identifier of a subcomponent refinement must exist as a defining subcomponent identifier in the local na	0	0	0
Subcomponents	p45n3	(N3) The component type identifier or the component implementation name of a component classifier reference must exi	0	0	0
Subcomponents	p45n4	(N4) The prototype identifier of a prototype reference must exist in the local name space of the component implementation.	0	0	0
Subcomponents	p45n5	(N5) The prototype referenced by the prototype binding declarations must exist in the local namespace of the component	0	0	0
Subcomponents	p45n6	(N6) The modes named in the in modes statement of a subcomponent must refer to modes in the component implement	0	0	0
Subcomponents	p45i1	(L1) The category of the subcomponent declaration must match the category of its corresponding component classifier re	0	0	0
Subcomponents	p45i2	(L2) The component classifier reference of a subcomponent declaration may include prototype bindings for a subset or a	0	0	0
Subcomponents	p45i3	(L3) In a subcomponent refinement declaration the component category may be refined from abstract to one of the concr	0	0	0
Subcomponents	p45i4	(L4) The Classifier_Substitution_Rule property specifies the rule to be applied when a refinement supplies a classifier an	0	0	0
Subcomponents	p45i5	(L5) In the case of a signature match, the component type of the subcomponent being refined must have a subset of the	0	0	0
Subcomponents	p45i6	(L6) The component category and optional component classifier or prototype reference can be followed by a set of array	0	0	0
Subcomponents	p45i7	(L7) The array size specification for the dimensions is optional. In this case the array declaration is considered incomple	0	0	0
Subcomponents	p45i8	(L8) When refining a subcomponent array the number of dimensions of the array cannot be changed, but the array size c	0	0	0
Subcomponents	p45i9	(L9) When the subcomponent is declared as an array with array dimension sizes then a list of component implementator	0	0	0
Subcomponents	p45i10	(L10) Selecting index ranges in one or more dimensions of an array is only possible if the size of the array for these dime	0	0	0
Subcomponents	p45i11	(L11) An array element implementation list is valid only if (a) the subcomponent classifier is a component type and (b) all	0	0	0
Subcomponents	p45c1	(C1) The classifier of a subcomponent cannot recursively contain subcomponents with the same component classifier. In	0	0	0
Abstract Components	p46i1	(L1) An abstract component type declaration can contain feature declarations (including abstract feature declarations), fl	0	0	0
Abstract Components	p46i2	(L2) An abstract component implementation can contain subcomponent declarations of any category. Certain combinatio	0	0	0
Abstract Components	p46i3	(L3) An abstract component implementation can contain a modes subclause, a connections subclause, a flows subclaus	0	0	0
Abstract Components	p46i4	(L4) An abstract subcomponent can be contained in the implementation of any component category.	0	0	0
Abstract Components	p46i5	(L5) If an abstract subcomponent is refined to a concrete category, the concrete category must be acceptable to the com	0	0	0
Abstract Components	p46i6	(L6) An abstract subcomponent can be declared as an array of subcomponents.	0	0	0
Abstract Components	p46i7	(L7) If an abstract component type is refined to a concrete category, the features, modes, and flow specifications of the a	0	0	0
Abstract Components	p46i8	(L8) If an abstract component implementation is refined to a concrete category, the subcomponents, call sequences, mo	0	0	0
Prototypes	p47n1	(N1) The prototype identifier on the left-hand side of a prototype binding must exist in the local namespace of the classifi	0	0	0
Prototypes	p47n2	(N2) The prototype identifier on the right-hand side of a prototype binding, if present, must exist in the local namespace o	0	0	0
Prototypes	p47n3	(N3) Unique component classifier references must exist in the public section of the package being identified in the refer	0	0	0
Prototypes	p47n4	(N4) Unique feature group type references must exist in the public section of the package being identified in the reference.	0	0	0
Prototypes	p47i1	(L1) The component category declared in the component prototype binding must match the component category of the p	0	0	0
Prototypes	p47i2	(L2) The component category of the optional component classifier reference in the prototype declaration must match the	0	0	0
Prototypes	p47i3	(L3) If the component prototype only specifies a component category, then any component type and component impleme	0	0	0
Prototypes	p47i4	(L4) If the component prototype declaration includes a component classifier reference, then the classifier supplied in the	0	0	0
Prototypes	p47i5	(L5) The category of the component implementation that contains the prototype declaration places restrictions on the set	0	0	0
Prototypes	p47i6	(L6) If the direction is declared for feature prototypes, then the prototype actual satisfies the direction according to the sa	0	0	0
Prototypes	p47i7	(L7) In the case of feature group prototypes, the supplied feature group types must match the declared feature group typ	0	0	0
Prototypes	p47i8	(L8) A classifier supplied in a feature prototype binding must match the classifier of the prototype declaration, if present, &	0	0	0
Prototypes	p47i9	(L9) Component prototypes declared with square brackets specify that they expect a list of component classifiers. These	0	0	0
Prototypes	p47i10	(L10) The component category of the classifier reference or prototype reference in a prototype binding declaration must n	0	0	0

Prototypes	p47i11	(L11) If a direction is specified for an abstract feature in a prototype declaration, then the direction of the prototype actual	0	0	0
Prototypes	p47i12	(L12) Component prototype bindings must only bind component prototypes, feature group prototype bindings must only b	0	0	0
Prototypes	p47i13	(L13) Component prototype refinements must only refine component prototypes, feature group prototype refinements mu	0	0	0
Annex Subclauses and Ann	p48n1	(N1) The annex identifier must be the name of an approved annex or a project-specific identifier different from the approv	0	0	0
Annex Subclauses and Ann	p48n2	(N2) The mode identifiers in the in_modes statement must refer to modes in the component type or component implemen	0	0	0
Annex Subclauses and Ann	p48i1	(L1) Annex subclauses can only be declared in component types, component implementations, and feature group types.	0	0	0
Annex Subclauses and Ann	p48i2	(L2) A component type, component implementation, or feature group type declaration may contain at most one annex su	0	0	0
Annex Subclauses and Ann	p48i3	(L3) Annex libraries must be declared in packages.	0	0	0
Annex Subclauses and Ann	p48i4	(L4) A package declaration may contain at most one annex library declaration for each annex.	0	0	0
Data	p51i1	(L1) A data type declaration can contain provides subprogram access declarations as well as property associations.	0	0	0
Data	p51i2	(L2) A data type declaration must not contain a flow specification or modes subclause.	0	0	0
Data	p51i3	(L3) A data implementation can contain abstract, data and subprogram subcomponents, access connections, and data p	0	0	0
Data	p51i4	(L4) A data implementation must not contain a flow implementation, an end-to-end flow specification, or a modes subclau	0	0	0
Subprograms and Subprog	p52n1	(N1) The defining identifier of a subprogram call sequence declaration must be unique within the local namespace of the	0	0	0
Subprograms and Subprog	p52n2	(N2) The defining identifier of a subprogram call declaration must be unique within the local namespace of the componen	0	0	0
Subprograms and Subprog	p52n3	(N3) If the called subprogram name is a subprogram classifier reference, its component type identifier or component imp	0	0	0
Subprograms and Subprog	p52n4	(N4) The subprogram classifier reference of a subprogram call may be a subprogram type reference.	0	0	0
Subprograms and Subprog	p52n5	(N5) If the called subprogram name is a subprogram subcomponent reference, the subprogram subcomponent must exist	0	0	0
Subprograms and Subprog	p52n6	(N6) If the called subprogram name is a requires subprogram access reference, the requires subprogram access must ex	0	0	0
Subprograms and Subprog	p52i1	(L1) A subprogram type declaration can contain parameter, out event port, out event data port, and feature group declara	0	0	0
Subprograms and Subprog	p52i2	(L2) A subprogram implementation can contain abstract, subprogram, and data subcomponents, a subprogram calls sub	0	0	0
Subprograms and Subprog	p52i3	(L3) Only one subprogram call sequence can apply to a given mode.	0	0	0
Subprograms and Subprog	p52c1	(C1) The reference to a provides subprogram access of a processor in a subprogram call (processor . provides_subprog	0	0	0
Subprograms and Subprog	p52c2	(C2) A subprogram call may reference a subprogram classifier. A project may enforce a consistency rule that this referen	0	0	0
Subprogram Groups and S	p53n1	(N1) The defining identifier of a subprogram group type must be unique within the package namespace of the package w	0	0	0
Subprogram Groups and S	p53n2	(N2) Each subprogram group provides a local namespace. The defining subprogram identifiers of subprogram declaratio	0	0	0
Subprogram Groups and S	p53n3	(N3) The local namespace of a subprogram group type extension includes the defining identifiers in the local namespace	0	0	0
Subprogram Groups and S	p53n4	(N4) The defining subprogram identifiers of subprogram access feature declarations in feature group refinements must n	0	0	0
Subprogram Groups and S	p53n5	(N5) The package name of the unique subprogram group type reference must refer to a package name in the global nam	0	0	0
Subprogram Groups and S	p53i1	(L1) A subprogram group type can contain provides and requires subprogram access, and provides and requires subpro	0	0	0
Subprogram Groups and S	p53i2	(L2) A subprogram group implementation can contain abstract, data, subprogram group, and subprogram subcomponent	0	0	0
Subprogram Groups and S	p53i3	(L3) A subprogram group type or implementation may contain zero or more subcomponent declarations. If it contains zer	0	0	0
Threads	p54i1	(L1) A thread type declaration can contain port, feature group, requires data access declarations, as well as requires and	0	0	0
Threads	p54i2	(L2) A thread component implementation can contain abstract, data, subprogram, and subprogram group subcomponent	0	0	0
Threads	p54i3	(L3) The Complete out event port, and Error out event data port are predeclared, i.e., are implicitly identifiers in the name	0	0	0
Threads	p54c3	(C3) Either the Compute_Entrypoint, Compute_Entrypoint_Source_Text Compute_Entrypoint_Call_Sequence property n	0	0	0
Threads	p54c4	(C4) The Period property must have a value if the Dispatch_Protocol property value is periodic, sporadic, timed, or hybrid	0	0	0
Thread Groups	p55i1	(L1) A thread group component type can contain provides and requires data access, as well as port, feature group, provi	0	0	0
Thread Groups	p55i2	(L2) A thread group component implementation can contain abstract, data, subprogram, subprogram group, thread, and	0	0	0
Thread Groups	p55i3	(L3) A thread group implementation can contain a connections subclause, a flows subclause, a modes subclause, and pr	0	0	0
Thread Groups	p55i4	(L4) A thread group must not contain a subprogram calls subclause.	0	0	0
Processes	p56i1	(L1) A process component type can contain port, feature group, provides and requires data access, provides and require	0	0	0
Processes	p56i2	(L2) A process component implementation can contain abstract, data, subprogram, subprogram group, thread, and threa	0	0	0
Processes	p56i3	(L3) A process implementation can contain a connections subclause, a flows subclause, a modes subclause, and a prop	0	0	0
Processes	p56i4	(L4) A thread group must not contain a subprogram calls subclause.	0	0	0
Processes	p56c1	(C1) The complete source text associated with a process component must form a complete and legal program as defined	0	0	0
Processors	p61i1	(L1) A processor component type can contain port, feature group, provides subprogram access, provides subprogram gr	0	0	0
Processors	p61i2	(L2) A processor component implementation can contain declarations of memory, bus, virtual bus, virtual processor, and	0	0	0
Processors	p61i3	(L3) A processor implementation can contain a modes subclause, flows subclause, and a properties subclause.	0	0	0

Processors	p6114	(L4) A processor implementation can contain bus access, subprogram access, subprogram group access, port, feature, and feature group.	0	0	0
Processors	p6115	(L5) A processor implementation must not contain a subprogram calls subclause.	0	0	0
Virtual Processors	p6211	(L1) A virtual processor component type can contain port, feature group, provides subprogram access, and subprogram group access.	0	0	0
Virtual Processors	p6212	(L2) A virtual processor component implementation can contain declarations of virtual bus, virtual processor, and abstract subcomponent.	0	0	0
Virtual Processors	p6213	(L3) A virtual processor implementation can contain a modes subclause, flows subclause, and a properties subclause.	0	0	0
Virtual Processors	p6214	(L4) A virtual processor implementation must not contain a subprogram calls subclause.	0	0	0
Virtual Processors	p6215	(L5) A virtual processor implementation can contain subprogram access, subprogram group access, port, feature, and feature group.	0	0	0
Virtual Processors	p62c1	(C1) In a fully bound system every virtual processor must be directly or indirectly bound to, or directly or indirectly contain a virtual processor.	0	0	0
Virtual Processors	p62c2	(C2) In a fully deployed system a requires virtual bus binding of a virtual processor specified by the Required_Virtual_Bus property.	0	0	0
Memory	p6311	(L1) A memory type can contain bus access declarations, feature groups, a modes subclause, and property associations.	0	0	0
Memory	p6312	(L2) A memory implementation can contain abstract, memory, and bus subcomponent declarations.	0	0	0
Memory	p6313	(L3) A memory implementation can contain a modes subclause and property associations.	0	0	0
Memory	p6314	(L4) A memory implementation can contain bus access connection declarations. Bus access connections can connect a memory to a bus.	0	0	0
Memory	p6315	(L5) A memory implementation must not contain flows subclause, or subprogram calls subclause.	0	0	0
Buses	p6411	(L1) A bus type can have requires bus access declarations, a modes subclause, and property associations.	0	0	0
Buses	p6412	(L2) A bus type must not contain any flow specifications.	0	0	0
Buses	p6413	(L3) A bus implementation can contain virtual bus and abstract subcomponent declarations.	0	0	0
Buses	p6414	(L4) A bus implementation can contain a modes subclause and property associations.	0	0	0
Buses	p6415	(L5) A bus implementation must not contain flows subclause, or subprogram calls subclause.	0	0	0
Virtual Buses	p6511	(L1) A virtual bus type can have property associations.	0	0	0
Virtual Buses	p6512	(L2) A virtual bus type must not contain flow specifications.	0	0	0
Virtual Buses	p6513	(L3) A virtual bus implementation can contain virtual bus subcomponent declarations.	0	0	0
Virtual Buses	p6514	(L4) A virtual bus implementation can contain a modes subclause and property associations.	0	0	0
Virtual Buses	p6515	(L5) A virtual bus implementation must not contain a connections subclause, flows subclause, or subprogram calls subclause.	0	0	0
Virtual Buses	p65c1	(C1) In a fully deployed system virtual buses must be directly or indirectly bound to processors or buses that support these virtual buses.	0	0	0
Devices	p6611	(L1) A device type can contain port, feature group, provides subprogram access, provides subprogram group access, bus access, and bus access connection.	0	0	0
Devices	p6612	(L2) A device component implementation must not contain a subprogram calls subclause.	0	0	0
Devices	p6613	(L3) A device implementation can contain abstract, data, virtual bus, and bus subcomponents, bus access connections, and bus access connection.	0	0	0
Systems	p7111	(L1) A system component type can contain subprogram, subprogram group, data and bus access declarations, port, feature, and feature group.	0	0	0
Systems	p7112	(L2) A system component implementation can contain abstract, data, subprogram, subprogram group, process, and system subcomponent.	0	0	0
Systems	p7113	(L3) A system implementation can contain a modes subclause, a connections subclause, a flows subclause, and a properties subclause.	0	0	0
Systems	p7114	(L4) A thread group must not contain a subprogram calls subclause.	0	0	0
Systems	p71n1	(N1) The defining identifier of a feature must be unique within the namespace of the associated component type.	0	0	0
Systems	p71n2	(N2) Thread features may not be declared using the predeclared ports names Complete or Error.	0	0	0
Systems	p71n3	(N3) Each refining feature identifier that appears in a feature refinement declaration must also appear in a feature declaration.	0	0	0
Systems	p71n4	(N4) A feature is referenced in one of two ways. Within the component implementations for a component type, a feature can be referenced by a feature group or a feature.	0	0	0
Systems	p71n5	(N5) The path of a contained property association for a feature must refer to an element of a feature group.	0	0	0
Systems	p7111	(L1) Each feature can be refined at most once in the same type extension.	0	0	0
Systems	p7112	(L2) A feature refinement declaration of a feature and the original feature must both be declared as port, parameter, access, or bus.	0	0	0
Systems	p7113	(L3) Feature arrays must only be declared for threads, devices, and processors.	0	0	0
Systems	p7114	(L4) If the feature refinement specifies an array dimension, then the feature being refined must have an array dimension.	0	0	0
Systems	p7115	(L5) If the refinement specifies an array dimension size, then the feature being refined must not have an array dimension.	0	0	0
Systems	p7116	(L6) A contained property association must only be used when the feature is a feature group.	0	0	0
Systems	p7117	(L7) In the case of a feature with a classifier reference, the classifier of the refined feature declaration in a component type must be the same as the classifier of the feature.	0	0	0
Abstract Features	p8111	(L1) The feature direction in a refined feature declaration must be identical to the feature direction in the feature declaration.	0	0	0
Abstract Features	p8112	(L2) If the direction of an abstract feature is specified, then the direction must be satisfied by the refinement (see also the direction of a feature group).	0	0	0
Abstract Features	p8113	(L3) An abstract feature with a feature prototype identifier and the prototype being referenced must both specify the same direction.	0	0	0
Abstract Features	p8114	(L4) An abstract feature refinement declaration of a feature with a feature prototype reference must only add property associations.	0	0	0

Feature Groups and Feature Groups	p82n1	(N1) The defining identifier of a feature group type must be unique within the package namespace of the package where	0	0	0
Feature Groups and Feature Groups	p82n2	(N2) Each feature group type provides a local namespace. The defining identifiers of prototype, feature, and feature group	0	0	0
Feature Groups and Feature Groups	p82n3	(N3) The local namespace of a feature group type extension includes the defining identifiers in the local namespace of the	0	0	0
Feature Groups and Feature Groups	p82n4	(N4) The defining feature identifiers of feature group declarations must be unique in the local namespace of the component	0	0	0
Feature Groups and Feature Groups	p82n5	(N5) The defining feature group identifier of feature_refinement declarations in component types must exist in the local namespace	0	0	0
Feature Groups and Feature Groups	p82n6	(N6) The package name of the unique feature group type reference must refer to a package name in the global namespace	0	0	0
Feature Groups and Feature Groups	p82n7	(N7) The prototype reference in a feature group declaration must refer to a prototype of the component type or feature group	0	0	0
Feature Groups and Feature Groups	p82i1	(L1) A feature group type may contain zero or more elements, i.e., feature or feature groups. If it contains zero elements,	0	0	0
Feature Groups and Feature Groups	p82i2	(L2) A feature group type can be declared to be the inverse of another feature group type, as indicated by the reserved word	0	0	0
Feature Groups and Feature Groups	p82i3	(L3) Only feature group types without inverse of or feature group types with features and inverse of can be extended.	0	0	0
Feature Groups and Feature Groups	p82i4	(L4) A feature group type that is an extension of another feature group type without an inverse of cannot contain an inverse of	0	0	0
Feature Groups and Feature Groups	p82i5	(L5) The feature group type that is an extension of another feature group type with features and inverse of that adds features	0	0	0
Feature Groups and Feature Groups	p82i6	(L6) A feature group declaration with an inverse of statement must only reference feature group types without an inverse of	0	0	0
Feature Groups and Feature Groups	p82i7	(L7) A feature group refinement may be refined to only add property associations. In this case inclusion of the feature group	0	0	0
Feature Groups and Feature Groups	p82i8	(L8) The number of feature or feature groups contained in the feature group and its complement must be identical;	0	0	0
Feature Groups and Feature Groups	p82i9	(L9) Each of the declared features or feature groups in a feature group must be a pair-wise complement with that in the feature	0	0	0
Feature Groups and Feature Groups	p82i10	(L10) If both feature group types have zero features, then they are considered to complement each other;	0	0	0
Feature Groups and Feature Groups	p82i11	(L11) Ports are pair-wise complementary if they satisfy the port connection rules specified in Section 9.2.1. This includes	0	0	0
Feature Groups and Feature Groups	p82i12	(L12) Access features are pair-wise complementary if they satisfy the access connection rules in Section 9.4.	0	0	0
Feature Groups and Feature Groups	p82i13	(L13) If an in or out direction is specified as part of a feature group declaration, then all features inside the feature group	0	0	0
Ports	p83n1	(N1) A defining port identifier must adhere to the naming rules specified for all features (see Section 8).	0	0	0
Ports	p83n2	(N2) The defining identifier of a port refinement declaration must also appear in a feature declaration of a component type	0	0	0
Ports	p83n3	(N3) The unique component type identifier of the data classifier reference must be the name of a data component type. The	0	0	0
Ports	p83n4	(N4) The prototype identifier of a prototype reference, if specified, must exist in the namespace of the component type or	0	0	0
Ports	p83i1	(L1) Ports can be declared in subprogram, thread, thread group, process, system, processor, virtual processor, and device	0	0	0
Ports	p83i2	(L2) Data and event data ports may be incompletely defined by not specifying the data component classifier reference or	0	0	0
Ports	p83i3	(L3) Data, event, and event data ports may be refined by adding a property association. The data component classifier d	0	0	0
Ports	p83i4	(L4) The port category of a port refinement must be the same as the category of the port being refined, or the port being	0	0	0
Ports	p83i5	(L5) The port direction of a port refinement must be the same as the direction of the feature being refined. If the feature b	0	0	0
Subprogram and Subprogram	p84n1	(N1) The defining identifier of a provides or requires subprogram or subprogram group access declaration must be unique	0	0	0
Subprogram and Subprogram	p84n2	(N2) The defining identifier of a provides or requires subprogram or subprogram group refinement must exist as a defining	0	0	0
Subprogram and Subprogram	p84n3	(N3) The component type identifier or component implementation name of a subprogram or subprogram group access cl	0	0	0
Subprogram and Subprogram	p84n4	(N4) The prototype identifier of a subprogram or subprogram group access classifier reference, if present, must exist in the	0	0	0
Subprogram and Subprogram	p84i1	(L1) If a subprogram access refers to a component classifier or a component prototype, then the category of the classifier	0	0	0
Subprogram and Subprogram	p84i2	(L2) If a subprogram group access refers to a component classifier or a component prototype, then the category of the cl	0	0	0
Subprogram and Subprogram	p84i3	(L3) An abstract feature can be refined into a subprogram access or a subprogram group access. In this case, the abstra	0	0	0
Subprogram and Subprogram	p84i4	(L4) A subprogram or subprogram group access declaration that does not specify a component classifier reference is inc	0	0	0
Subprogram and Subprogram	p84i5	(L5) A subprogram or subprogram group access declaration may be refined by adding a property association. Inclusion o	0	0	0
Subprogram and Subprogram	p84i6	(L6) A provides subprogram access cannot be refined to a requires subprogram access and a requires subprogram acce	0	0	0
Subprogram and Subprogram	p84c1	(C1) A provides subprogram access feature indicates that a subprogram is made available to be referenced. A project m	0	0	0
Subprogram Parameters	p85n1	(N1) The defining identifier of a parameter must be unique within the namespace of the subprogram type containing the p	0	0	0
Subprogram Parameters	p85n2	(N2) The defining parameter identifier of a parameter refinement declaration must also appear in a feature declaration of	0	0	0
Subprogram Parameters	p85n3	(N3) The data classifier reference must refer to a data component type or a data component implementation.	0	0	0
Subprogram Parameters	p85n4	(N4) The prototype identifier, if present, must exist in the namespace of the subprogram classifier that contains the paran	0	0	0
Subprogram Parameters	p85i1	(L1) Parameters can be declared for subprogram component types.	0	0	0
Subprogram Parameters	p85i2	(L2) A parameter declaration that does not specify a data classifier reference is incomplete. Such a reference can be add	0	0	0
Subprogram Parameters	p85i3	(L3) A parameter declaration may be refined by adding a property association. Inclusion of the data classifier reference is	0	0	0
Subprogram Parameters	p85i4	(L4) The parameter direction of a parameter refinement must be the same as the direction of the feature being refined. If	0	0	0
Data Component Access	p86n1	(N1) The defining identifier of a provides or requires data access declaration must be unique within the namespace of the	0	0	0
Data Component Access	p86n2	(N2) The defining identifier of a provides or requires data access refinement must exist as a defining identifier of a provid	0	0	0
Data Component Access	p86n3	(N3) The component type identifier or component implementation name of a data access classifier reference must exist i	0	0	0
Data Component Access	p86n4	(N4) The prototype identifier, if present, must exist in the namespace of the classifier that contains the data access decla	0	0	0

Data Component Access	p86i1	(L1) If a data access refers to a component classifier or a component prototype, then the category of the classifier or prototype must be a data access.	0	0	0
Data Component Access	p86i2	(L2) A data access declaration may be refined by refining the data classifier, by adding a property association, or by doing a data access refinement.	0	0	0
Data Component Access	p86i3	(L3) A provides data access cannot be refined to a requires data access and a requires data access cannot be refined to a provides data access.	0	0	0
Data Component Access	p86i4	(L4) An abstract feature can be refined into a data access. In this case, the abstract feature must not have a direction specified.	0	0	0
Data Component Access	p86c1	(C1) A data access declaration that does not specify a data classifier reference is incomplete. Such a reference can be added to the declaration.	0	0	0
Data Component Access	p86c2	(C2) If the source code of a component does access shared data, then the component type declaration must specify a requires data access.	0	0	0
Data Component Access	p86c3	(C3) A data access refinement may refine an abstract feature declaration. If the abstract feature declaration specifies a direction, the refinement must also specify a direction.	0	0	0
Bus Component Access	p87n1	(N1) The defining identifier of a provides or requires bus access declaration must be unique within the namespace of the component.	0	0	0
Bus Component Access	p87n2	(N2) The defining identifier of a provides or requires bus refinement must exist as a defining identifier of a requires or provides bus access.	0	0	0
Bus Component Access	p87n3	(N3) The component type identifier or component implementation name of a bus access classifier reference must exist in the namespace of the component.	0	0	0
Bus Component Access	p87n4	(N4) The prototype identifier, if present, must exist in the namespace of the classifier that contains the bus access declaration.	0	0	0
Bus Component Access	p87i1	(L1) If a bus access refers to a component classifier or a component prototype, then the category of the classifier or prototype must be a bus access.	0	0	0
Bus Component Access	p87i2	(L2) A bus access declaration may be refined by refining the bus classifier, by adding a property association, or by doing a bus access refinement.	0	0	0
Bus Component Access	p87i3	(L3) A provides bus access cannot be refined to a requires bus access and a requires bus access cannot be refined to a provides bus access.	0	0	0
Bus Component Access	p87i4	(L4) An abstract feature can be refined into a bus access. In this case, the abstract feature must not have a direction specified.	0	0	0
Bus Component Access	p87c1	(C1) A bus access declaration that does not specify a bus classifier reference is incomplete. Such a reference can be added to the declaration.	0	0	0
Bus Component Access	p87c2	(C2) If a bus access feature is a refinement of an abstract feature, then the direction of the abstract feature, if specified, must be the same as the direction of the bus access.	0	0	0
Bus Component Access	p87n1	(N1) The defining identifier of a defined connection declaration must be unique in the local namespace of the component.	0	0	0
Bus Component Access	p87n2	(N2) The connection identifier in a connection refinement declaration must refer to a named connection declared in an ancestor component.	0	0	0
Bus Component Access	p87i1	(L1) A connection refinement must contain at least one of the following: a connection source and destination subclause, a connection direction subclause, or a connection mode subclause.	0	0	0
Bus Component Access	p87i2	(L2) If a semantic connection may be active in a particular mode, then the ultimate source and ultimate destination components must be unique.	0	0	0
Bus Component Access	p87i3	(L3) If a semantic connection may be active in a particular mode transition, then the ultimate source component must be unique.	0	0	0
Feature Connections	p91n1	(N1) A source or destination reference in a feature connection or feature connection refinement declaration must reference a feature.	0	0	0
Feature Connections	p91n2	(N2) The subcomponent reference may refer to a subcomponent or a subcomponent array.	0	0	0
Feature Connections	p91i1	(L1) If the feature connection declaration represents a connection between features of sibling components, then the source and destination references must be unique.	0	0	0
Feature Connections	p91i2	(L2) If the feature connection declaration represents a connection between features up the containment hierarchy, then the source reference must be unique.	0	0	0
Feature Connections	p91i3	(L3) If the feature connection declaration represents a connection between features down the containment hierarchy, then the destination reference must be unique.	0	0	0
Feature Connections	p91i4	(L4) If the feature connection declaration specifies a directional connection, then the direction of the connection must be the same as the direction of the feature.	0	0	0
Feature Connections	p91i5	(L5) The individual connections of a semantic connection must be bidirectional or have the same direction. The direction must be specified.	0	0	0
Port Connections	p92n1	(N1) The connection identifier in a port connection refinement declaration must refer to a named port or feature connection.	0	0	0
Port Connections	p92n2	(N2) A source or destination reference in a port connection or port connection refinement declaration must reference a port or feature connection.	0	0	0
Port Connections	p92n3	(N3) The subcomponent reference may also consist of a reference to a subcomponent array.	0	0	0
Port Connections	p92n4	(N4) The event_or_event_data identifier of event source specifications (self.event_or_event_data_identifier) must not contain a space.	0	0	0
Port Connections	p92i1	(L1) In the case of a directional port connection the connection end representing the source of the flow must be the source of the connection.	0	0	0
Port Connections	p92i2	(L2) In the case of a bidirectional port connection either connection end can be the source. If the bidirectional connection is active, then both ends must be the source.	0	0	0
Port Connections	p92i3	(L3) If the source connection end is a data access feature it must have read access rights; if the destination connection end is a data access feature it must have write access rights.	0	0	0
Port Connections	p92i4	(L4) The feature identifier of a subcomponent reference may refer to a feature array, if the subcomponent is a thread, device, or processor.	0	0	0
Port Connections	p92i5	(L5) The following are acceptable sources and destinations of port connections. The left column shows connections between components, the right column shows connections between features.	0	0	0
Port Connections	p92i6	(L6) If the port connection declaration represents a connection between ports of sibling components, then the source must be unique.	0	0	0
Port Connections	p92i7	(L7) If the port connection declaration represents a connection between ports up the containment hierarchy, then the source must be unique.	0	0	0
Port Connections	p92i8	(L8) If the port connection declaration represents a connection between ports down the containment hierarchy, then the destination must be unique.	0	0	0
Port Connections	p92i9	(L9) The individual connections of a semantic port connection must be bidirectional or have the same direction. The direction must be specified.	0	0	0
Port Connections	p92i10	(L10) Self.<identifier> must only be referenced as the source of a connection.	0	0	0
Port Connections	p92i11	(L11) A data port cannot be the destination of more than one semantic port connection unless each semantic port connection has a unique identifier.	0	0	0
Port Connections	p92i12	(L12) A semantic connection cannot contain connection declarations with both immediate and delayed Timing property values.	0	0	0
Port Connections	p92i13	(L13) For connections between data ports, event data ports and data access, the data classifier of the source port must be the same as the data classifier of the destination port.	0	0	0
Port Connections	p92i14	(L14) The following rules are supported: $\mathbf{a} \rightarrow \mathbf{b}$ $\mathbf{a} \rightarrow \mathbf{b}$ $\mathbf{a} \rightarrow \mathbf{b}$ $\mathbf{a} \rightarrow \mathbf{b}$ Classifier_Match: The source data type and data implementation must be the same as the destination data type and data implementation.	0	0	0
Port Connections	p92i15	(L15) If more than one port connection declaration in a semantic port connection has a property association for a given component, then the property association must be the same.	0	0	0
Port Connections	p92i16	(L16) A processor port specification must only be used in event connections within threads and subprograms.	0	0	0
Port Connections	p92c1	(C1) There cannot be cycles of immediate connections between threads, devices, and processors.	0	0	0
Port Connections	p92c2	(C2) The processor port identifier of a processor port specification (processor.processor_port_identifier) must name a processor.	0	0	0
Port Connections	p92c3	(C3) The Supports_Classifier_Subset_Matches property may be associated with a bus or virtual bus. This specifies the subset of classifiers that are supported.	0	0	0
Port Connections	p92c4	(C4) The Supports_Type_Conversions property may be associated with a bus or virtual bus. This specifies the subset of types that are supported.	0	0	0

Parameter Connections	p93n1	(N1) The connection identifier in a parameter connection refinement declaration must refer to a named parameter or feat	0	0	0
Parameter Connections	p93n2	(N2) A source (destination) reference in a parameter connection declaration must reference a parameter of a preceding (0	0	0
Parameter Connections	p93l1	(L1) The source of a parameter connection must be an incoming data or event data port of the containing thread, an inco	0	0	0
Parameter Connections	p93l2	(L2) The following source/destination pairs are acceptable for parameter connection declarations: threadport -> call.par	0	0	0
Parameter Connections	p93l3	(L3) A parameter cannot be the destination feature reference of more than one parameter connection declaration unless	0	0	0
Parameter Connections	p93l4	(L4) The data classifier of the source and destination must match. The matching rules as specified by the Classifier_Matc	0	0	0
Access Connections	p94n1	(N1) The connection identifier in an access connection refinement declaration must refer to a named access or feature co	0	0	0
Access Connections	p94n2	(N2) An access reference in an access connection declaration must reference an access feature of a subcomponent, sub	0	0	0
Access Connections	p94l1	(L1) The category of the source and the destination of a access connection declaration must be the same, i.e., they must	0	0	0
Access Connections	p94l2	(L2) In the case of a bidirectional semantic access connection either connection end can be the source.	0	0	0
Access Connections	p94l3	(L3) In the case of a directional data or bus access connection the connection end representing the component being acc	0	0	0
Access Connections	p94l4	(L4) In a partial AADL model the ultimate source or destination may be a provides access feature of a component instea	0	0	0
Access Connections	p94l5	(L5) If the access connection declaration represents an access connection between access features of sibling componen	0	0	0
Access Connections	p94l6	(L6) If the access connection declaration represents a feature mapping up the containment hierarchy, then one connecti	0	0	0
Access Connections	p94l7	(L7) If the access connection declaration represents a feature mapping down the containment hierarchy, then one conne	0	0	0
Access Connections	p94l8	(L8) A requires access cannot be the source or destination feature reference of more than one access connection declar	0	0	0
Access Connections	p94l9	(L9) For access connections the classifier of the provider access must match to the classifier of the requires access acco	0	0	0
Access Connections	p94l10	(L10) If more than one access feature in a semantic access connection has an Access_Right property association, then t	0	0	0
Access Connections	p94l11	(L11) The category of the access connection source and destination must be identical. If the component category is spec	0	0	0
Feature Group Connections	p95n1	(N1) The connection identifier in a feature group connection refinement declaration must refer to a feature group named c	0	0	0
Feature Group Connections	p95n2	(N2) A source or destination reference in a feature group connection declaration must reference a feature group declared	0	0	0
Feature Group Connections	p95l1	(L1) If the feature group connection declaration represents a component connection between sibling components, the fea	0	0	0
Feature Group Connections	p95l2	(L2) The Classifier_Matching_Rule property specifies the rule to be applied to match the feature group classifier of a con	0	0	0
Feature Group Connections	p95l3	(L3) The following rules are supported for feature group connection declarations that represent a connection up or down	0	0	0
Feature Group Connections	p95l4	(L4) The following rules are supported for feature group connection declarations that represent a connection between two	0	0	0
Feature Group Connections	p95l5	(L5) If the feature group connection declaration represents a connection between feature group of sibling components, th	0	0	0
Feature Group Connections	p95l6	(L6) If the feature group connection declaration represents a connection between feature groups up the containment hier	0	0	0
Feature Group Connections	p95l7	(L7) If the feature group connection declaration represents a connection between feature groups down the containment h	0	0	0
Feature Group Connections	p95l8	(L8) A feature group connection must be bidirectional or be consistent with the direction of the source and destination fea	0	0	0