

# NamespaceModel.java

SECTION NAME	ID	POS	NEG	RULE TEXT	COMMENTARY	RULE FULL TEXT	
AADL Specification	p41n1	0	0	Identifiers in specification namespace must be unique.	Checked when processing package and property set nodes	(N1) An AADL specification has one global namespace. The package and property set identifiers reside in this namespace.	0
AADL Specification	p41n2	0	0			(N2) These package and property set identifiers qualify the names of individual elements contained in the specification.	0
AADL Specification	p41n3	0	0			(N3) Package declarations represent labeled namespaces for component type, component implementation, and property type.	0
AADL Specification	p41n4	0	0			(N4) Property set declarations represent labeled namespaces for property type and property definition declaration.	0
AADL Specification	p41n5	0	0		Provided by parser	(N5) Packages and property sets may be separately stored. Those packages and property sets are considered as separate namespaces.	0
AADL Specification	p41n6	0	0		Provided by parser	(N6) Defining identifiers in AADL must not be one of the reserved words of the language (see Section 15.1).	0
AADL Specification	p41n7	0	0		Provided by realization of AADLIdentifier class	(N7) The AADL identifiers and reserved words can be in upper or lower case (or a mixture of the two) (see Section 15.1).	0
AADL Specification	p41n8	0	0			(N8) The AADL does not require that an identifier be declared before it is referenced.	0
Packages	p42n1	0	0	A defining package name must be unique in the global namespace.	Checked by counting private and public package declarations	(N1) A defining package name consists of a sequence of one or more package identifiers separated by a period.	0
Packages	p42n2	0	0		Provided by parser	(N2) The public and private section of a package may be declared in separate package declarations; these are then merged.	0
Packages	p42n3	0	0			(N3) Associated with every package is a package namespace that contains the names for all the elements declared in the package.	0
Packages	p42n4	0	0			(N4) The package namespace is divided into a public section and a private section. Items declared in the public section are visible to other packages.	0
Packages	p42n5	0	0		Can be checked after all possible references are known	(N5) The reference to an item declared in another package must be an item name qualified with a package name.	0
Packages	p42n6	0	0		Can be checked after all possible references are known	(N6) The reference to a property other than predeclared properties must be an property name qualified with a package name.	0
Packages	p42n7	0	0	The package name in an import_declaration must exist in the global namespace.	Checked when processing package imports	(N7) The package name in an import_declaration must exist in the global namespace.	0
Packages	p42n8	0	0		Checked when processing package imports	(N8) The property set identifier in an import_declaration must exist in the global namespace.	0
Packages	p42n9	0	0		Can be checked after all possible references are known	(N9) Items declared in the private section of the package can only be referenced from within the private section.	0
Packages	p42n10	0	0			(N10) If the qualifying package identifier of a qualified reference is missing, the referenced component class is assumed to be in the global namespace.	0
Packages	p42n11global	0	0	The package name referenced in an alias_declaration must exist in the global namespace.	Checked when processing package aliases	(N11) The package name referenced in an alias_declaration must exist in the global namespace and must be unique.	0
Packages	p42n11import	0	0	The package name referenced in an alias_declaration must be listed in the import_declaration.	Checked when processing package aliases	(N11) The package name referenced in an alias_declaration must exist in the global namespace and must be unique.	0
Packages	p42n12	0	0	Classifier referenced is not found in public package section.	Checked when processing classifier aliases	(N12) The classifier referenced by the alias_declaration must exist in the namespace of the public section.	0
Packages	p42n12other	0	0	Wrong reference structure, no package is referenced	Checked when processing classifier aliases	(N12) The classifier referenced by the alias_declaration must exist in the namespace of the public section.	0
Packages	p42n13	0	0		Provided by parser	(N13) The classifier referenced by the alias declaration must refer to a component type or a feature group.	0
Packages	p42n14package	0	0	Conflict of alias name of the package with imported package.	Checked when processing package and classifier aliases	(N14) The defining identifier of an alias_declaration must be unique in the namespace of the package containing the alias_declaration.	0
Packages	p42n14defining	0	0	Conflict of alias name of the package with package name where it is defined.	Checked when processing package and classifier aliases	(N14) The defining identifier of an alias_declaration must be unique in the namespace of the package containing the alias_declaration.	0
Packages	p42n14other	0	0	The defining identifier of an alias_declaration is not unique in package namespace.	Checked when processing package and classifier aliases	(N14) The defining identifier of an alias_declaration must be unique in the namespace of the package containing the alias_declaration.	0
Packages	p42n15	0	0	The defining identifier of an alias_declaration is not unique in package namespace. (identifier not specified)	Checked when processing classifier aliases	(N15) The alias_declaration makes the publicly visible identifier of classifiers declared in another package.	0
Packages	p42n16	0	0	The defining identifier of an alias_declaration is not unique in package namespace. ("all" alias declaration)	Checked when processing all aliases by intersection of two namespaces	(N16) If the alias_declaration renames all publicly visible identifiers of component types and feature group.	0
Packages	p42n17	0	0		Can be checked after all possible references are known	(N17) The identifiers introduced by the alias_declaration are only accessible within the package. When declared in a package, they are not accessible from other packages.	0
Packages	p42n18	0	0			(N18) The alias declared for a component type can be used instead of a qualified component type in a reference.	0
Packages	p42i1	0	0		Provided by parser	(L1) The defining package name following the reserved word and must be identical to the defining package name.	0
Packages	p42i2	0	0		Checked with p42n1	(L2) For each package there may be at most one public section declaration and one private section declaration.	0
Packages	p42i3	0	0	Public part of component implementation can contain only properties and modes if it is declared in both public and private sections.	Checked when processing component implementations	(L3) A component implementation may be declared in both the public and private part of a package. In this case, the public part must contain only properties and modes.	0
Packages	p42i4	0	0	The component category does not match the category of referenced component type.	Checked when processing classifier aliases	(L4) The component category in an alias declaration must match the category of the referenced component type.	0
Component Types	p43n1	0	0	The defining identifier for a component type is not unique in the namespace of the package.	Checked when creating local namespaces of the packages	(N1) The defining identifier for a component type must be unique in the namespace of the package within which it is declared.	0
Component Types	p43n2	0	0	Identifier is not unique in component type local namespace.	Checked when creating local namespaces of component types	(N2) Each component type has a local namespace for defining identifiers of prototypes, features, modes, and properties.	0
Component Types	p43n3	0	0	Ancestor in a component type extension must exist.	Checked when processing component type declarations	(N3) The component type identifier of the ancestor in a component type extension, i.e., that appears after the extension keyword, must be the identifier of a component type declared in the same package.	0
Component Types	p43n4	0	0	Identifier is not unique in component type namespace because of it's ancestors.	Checked by recursive creating ancestors namespace when processing component type declarations	(N4) When a component type extends another component type, a component type namespace includes the namespace of the ancestor.	0
Component Types	p43n5	0	0			(N5) A component type that extends another component type does not include the identifiers of the implemented features, modes, and properties.	0
Component Types	p43n6	0	0		Same as p43n2?	(N6) The defining identifier of a feature, flow specification, mode, mode transition, or prototype must be unique within the component type namespace.	0
Component Types	p43n7	0	0			(N7) The refinement identifier of a feature, flow specification, or prototype refinement refers to the closest ancestor component type.	0
Component Types	p43n8	0	0			(N8) The prototypes referenced by prototype binding declarations must exist in the local namespace of the component type.	0
Component Types	p43n9	0	0			(N9) Mode transitions declared in the component type may not refer to event or event data ports of subcomponents.	0
Component Types	p43i1	0	0		Provided by parser	(L1) The defining identifier following the reserved word and must be identical to the defining identifier that follows the component type identifier.	0
Component Types	p43i2	0	0		Provided by parser(kinda, error is - "No viable alternative")	(L2) The prototypes, features, flows, modes, and properties subclauses are optional. If a subclause is present, it must be preceded by the keyword 'and'.	0
Component Types	p43i3	0	0	The category of the component type being extended must match the category of the extending component type.	Checked when processing component type declarations	(L3) The category of the component type being extended must match the category of the extending component type.	0
Component Types	p43i4	0	0			(L4) The classifier being extended in a component type extension may include prototype bindings. There must be at least one prototype binding.	0
Component Types	p43i5	0	0		Provided by parser(kinda, error is - extraneous input 'requires' expecting 'ANNEX')	(L5) A component type must not contain both a requires_subclause and a modes_subclause.	0
Component Types	p43i6	0	0	Component type and it's ancestor should have both modes or requires modes subclauses.	Checked when processing component type declarations	(L6) If the extended component type and an ancestor component type in the extends hierarchy contain no modes or requires modes subclauses, then the extended component type must contain a modes_subclause or a requires_subclause.	0
Component Types	???	0	0		Provided by parser(kinda, error is - no viable alternative at input '')	The defining identifier for a component type cannot contain ''.	0
Component Implern	p44n1	0	0	Component type of component implementation is not declared.	1 - Provided by parser(kinda, error is - mismatched input 'end' expecting '') 2 - checked when creating local namespaces of the packages	(N1) A component implementation name consists of a component type identifier and a component implementation identifier.	0
Component Implern	p44n2	0	0	The defining identifier for a component implementation is not unique in the local namespace of the component type.	Checked when creating local namespaces of the packages	(N2) The defining identifier of the component implementation must be unique within the local namespace of the component type.	0
Component Implern	p44n3	0	0	Identifier is not unique in component implementation local namespace.	Checked when creating local namespaces of component implementations (without package)	(N3) Every component implementation defines a local namespace for all defining identifiers of prototypes, features, modes, and properties.	0
Component Implern	p44n4	0	0	Component implementation contains identifier which intersects with component type local namespace.	Checked by intersection of local namespaces of type and impl	(N4) This local namespace inherits the namespace of the associated component type, i.e., defining identifiers of the component type are visible in this namespace.	0
Component Implern	p44n5	0	0			(N5) Refinement identifiers of features must exist in the namespace of the associated component type or its ancestor.	0
Component Implern	p44n6	0	0			(N6) In a component implementation extension, the component type identifier of the component implemented must be the identifier of a component type declared in the same package.	0
Component Implern	p44n7	0	0			(N7) When a component implementation extends another component implementation, the local namespace of the extending component implementation must include the local namespace of the extended component implementation.	0

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Component Implern	p44n8	0	0	0	(N8) Within the scope of the component implementation, subcomponent declarations, connections, subcomponent	0
Component Implern	p44n9	0	0	0	(N9) The prototype referenced by the prototype binding declaration must exist in the local namespace of the	0
Component Implern	p4411	0	0	0	(L1) The pair of identifiers separated by a dot (a75n.a75k) following the reserved word end must be ident	0
Component Implern	p4412	0	0	0	(L2) The prototypes, subcomponents, connections, calls, flows, modes, and properties subclauses are op	0
Component Implern	p4413	0	0	Component implementation category does not match it's component type category.	Checked when processing classifier implementations	0
Component Implern	p4414	0	0	The category of the component implementation being extended must match the category of the extending compone	Checked when processing classifier implementations	0
Component Implern	p4415	0	0	0	(L5) The classifier being extended in a component implementation extension may include prototype bindi	0
Component Implern	p4416	0	0	Component implementation must not contain mode subclause because component type contains requires modes s	Checked when processing classifier implementations,NUT not watching at present	0
Component Implern	p4417	0	0	If modes are declared in the component type, then modes cannot be declared in component implementations	Checked when processing classifier implementations,NUT not watching at present	0
Component Implern	p4418	0	0	0	(L7) If modes are declared in the component type, then modes cannot be declared in component implem	0
Component Implern	p4419	0	0	0	(L8) If modes or mode transitions are declared in the component type, then mode transitions can be adde	0
Component Implern	p44110	0	0	0	(L9) The category of a subcomponent being refined must match the category of the refining subcomponent	0
Component Implern	p44111	0	0	0	(L10) For all other refinement declarations the categories must match (see the respective sections).	0
Component Implern	p44111	0	0	0	(L11) Component implementations and component implementation extensions must not refine prototypes	0
Subcomponents	p45n1	0	0	0	(N1) The defining identifier of a subcomponent declaration placed in a component implementation must b	0
Subcomponents	p45n2	0	0	0	(N2) The defining identifier of a subcomponent refinement must exist as a defining subcomponent identi	0
Subcomponents	p45n3	0	0	0	(N3) The component type identifier or the component implementation name of a component classifier refe	0
Subcomponents	p45n4	0	0	0	(N4) The prototype identifier of a prototype reference must exist in the local name space of the compon	0
Subcomponents	p45n5	0	0	0	(N5) The prototype referenced by the prototype binding declarations must exist in the local namespace of	0
Subcomponents	p45n6	0	0	0	(N6) The modes named in the in modes statement of a subcomponent must refer to modes in the compo	0
Subcomponents	p4511	0	0	0	(L1) The category of the subcomponent declaration must match the category of its corresponding compo	0
Subcomponents	p4512	0	0	0	(L2) The component classifier reference of a subcomponent declaration may include prototype bindings f	0
Subcomponents	p4513	0	0	0	(L3) In a subcomponent refinement declaration the component category may be refined from abstract to c	0
Subcomponents	p4514	0	0	0	(L4) The Classifier_Substitution_Rule property specifies the rule to be applied when a refinement supplie	0
Subcomponents	p4515	0	0	0	(L5) In the case of a signature match, the component type of the subcomponent being refined must have	0
Subcomponents	p4516	0	0	0	(L6) The component category and optional component classifier or prototype reference can be followed b	0
Subcomponents	p4517	0	0	0	(L7) The array size specification for the dimensions is optional. In this case the array declaration is const	0
Subcomponents	p4518	0	0	0	(L8) When refining a subcomponent array the number of dimensions of the array cannot be changed, but	0
Subcomponents	p4519	0	0	0	(L9) When the subcomponent is declared as an array with array dimension sizes then a list of component	0
Subcomponents	p45110	0	0	0	(L10) Selecting index ranges in one or more dimensions of an array is only possible if the size of the array	0
Subcomponents	p45111	0	0	0	(L11) An array element implementation list is valid only if (a) the subcomponent classifier is a component	0
Subcomponents	p45c1	0	0	0	(C1) The classifier of a subcomponent cannot recursively contain subcomponents with the same compone	0
Abstract Componen	p4611	0	0	0	(L1) An abstract component type declaration can contain feature declarations (including abstract feature	0
Abstract Componen	p4612	0	0	0	(L2) An abstract component implementation can contain subcomponent declarations of any category. Ca	0
Abstract Componen	p4613	0	0	0	(L3) An abstract component implementation can contain a modes subclause, a connections subclause, a	0
Abstract Componen	p4614	0	0	0	(L4) An abstract subcomponent can be contained in the implementation of any component category.	0
Abstract Componen	p4615	0	0	0	(L5) If an abstract subcomponent is refined to a concrete category, the concrete category must be accep	0
Abstract Componen	p4616	0	0	0	(L6) An abstract subcomponent can be declared as an array of subcomponents.	0
Abstract Componen	p4617	0	0	0	(L7) If an abstract component type is refined to a concrete category, the features, modes, and flow specifi	0
Abstract Componen	p4618	0	0	0	(L8) If an abstract component implementation is refined to a concrete category, the subcomponents, call	0
Prototypes	p47n1	0	0	0	(N1) The prototype identifier on the left-hand side of a prototype binding must exist in the local namespac	0
Prototypes	p47n2	0	0	0	(N2) The prototype identifier on the right-hand side of a prototype binding, if present, must exist in the loc	0
Prototypes	p47n3	0	0	0	(N3) Unique component classifier references must exist in the public section of the package being identifi	0
Prototypes	p47n4	0	0	0	(N4) Unique feature group type references must exist in the public section of the package being identified	0
Prototypes	p4711	0	0	0	(L1) The component category declared in the component prototype binding must match the component c	0
Prototypes	p4712	0	0	0	(L2) The component category of the optional component classifier reference in the prototype declaration	0
Prototypes	p4713	0	0	0	(L3) If the component prototype only specifies a component category, then any component type and comp	0
Prototypes	p4714	0	0	0	(L4) If the component prototype declaration includes a component classifier reference, then the classifier	0
Prototypes	p4715	0	0	0	(L5) The category of the component implementation that contains the prototype declaration places restric	0
Prototypes	p4716	0	0	0	(L6) If the direction is declared for feature prototypes, then the prototype actual satisfies the direction acc	0
Prototypes	p4717	0	0	0	(L7) In the case of feature group prototypes, the supplied feature group types must match the declared fe	0
Prototypes	p4718	0	0	0	(L8) A classifier supplied in a feature prototype binding must match the classifier of the prototype declar	0
Prototypes	p4719	0	0	0	(L9) Component prototypes declared with square brackets specify that they expect a list of component cl	0
Prototypes	p47110	0	0	0	(L10) The component category of the classifier reference or prototype reference in a prototype binding de	0
Prototypes	p47111	0	0	0	(L11) If a direction is specified for an abstract feature in a prototype declaration, then the direction of the p	0
Prototypes	p47112	0	0	0	(L12) Component prototype bindings must only bind component prototypes, feature group prototype bindi	0
Prototypes	p47113	0	0	0	(L13) Component prototype refinements must only refine component prototypes, feature group prototype	0
Annex Subclauses	p48n1	0	0	0	(N1) The annex identifier must be the name of an approved annex or a project-specific identifier different	0

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Annex Subclauses	p48n2	0	0	0	(N2) The mode identifiers in the in_modes statement must refer to modes in the component type or component implementation.	0
Annex Subclauses	p48i1	0	0	0	(L1) Annex subclauses can only be declared in component types, component implementations, and feature group type declarations.	0
Annex Subclauses	p48i2	0	0	0	(L2) A component type, component implementation, or feature group type declaration may contain at most one annex subclause.	0
Annex Subclauses	p48i3	0	0	0	(L3) Annex libraries must be declared in packages.	0
Annex Subclauses	p48i4	0	0	0	(L4) A package declaration may contain at most one annex library declaration for each annex.	0
Data	p51i1	0	0	0	(L1) A data type declaration can contain provides subprogram access declarations as well as property access declarations.	0
Data	p51i2	0	0	0	(L2) A data type declaration must not contain a flow specification or modes subclause.	0
Data	p51i3	0	0	0	(L3) A data implementation can contain abstract, data and subprogram subcomponents, access connections, and properties subclauses.	0
Data	p51i4	0	0	0	(L4) A data implementation must not contain a flow implementation, an end-to-end flow specification, or a modes subclause.	0
Subprograms and	p52n1	0	0	0	(N1) The defining identifier of a subprogram call sequence declaration must be unique within the local namespace.	0
Subprograms and	p52n2	0	0	0	(N2) The defining identifier of a subprogram call declaration must be unique within the local namespace.	0
Subprograms and	p52n3	0	0	0	(N3) If the called subprogram name is a subprogram classifier reference, its component type identifier or component implementation identifier must be unique within the local namespace.	0
Subprograms and	p52n4	0	0	0	(N4) The subprogram classifier reference of a subprogram call may be a subprogram type reference.	0
Subprograms and	p52n5	0	0	0	(N5) If the called subprogram name is a subprogram subcomponent reference, the subprogram subcomponent reference must be unique within the local namespace.	0
Subprograms and	p52n6	0	0	0	(N6) If the called subprogram name is a requires subprogram access reference, the requires subprogram access reference must be unique within the local namespace.	0
Subprograms and	p52i1	0	0	0	(L1) A subprogram type declaration can contain parameter, out event port, out event data port, and feature group type subclauses.	0
Subprograms and	p52i2	0	0	0	(L2) A subprogram implementation can contain abstract, subprogram, and data subcomponents, a subprogram access connection, and properties subclauses.	0
Subprograms and	p52i3	0	0	0	(L3) Only one subprogram call sequence can apply to a given mode.	0
Subprograms and	p52c1	0	0	0	(C1) The reference to a provides subprogram access of a processor in a subprogram call (processor : provides) must be unique within the local namespace.	0
Subprograms and	p52c2	0	0	0	(C2) A subprogram call may reference a subprogram classifier. A project may enforce a consistency rule that a subprogram call must not reference a subprogram classifier.	0
Subprogram Group	p53n1	0	0	0	(N1) The defining identifier of a subprogram group type must be unique within the package namespace.	0
Subprogram Group	p53n2	0	0	0	(N2) Each subprogram group provides a local namespace. The defining subprogram identifiers of subprogram calls in the local namespace must be unique within the local namespace.	0
Subprogram Group	p53n3	0	0	0	(N3) The local namespace of a subprogram group type extension includes the defining identifiers in the local namespace of the base type.	0
Subprogram Group	p53n4	0	0	0	(N4) The defining subprogram identifiers of subprogram access feature declarations in feature group references must be unique within the local namespace.	0
Subprogram Group	p53n5	0	0	0	(N5) The package name of the unique subprogram group type reference must refer to a package name in the package namespace.	0
Subprogram Group	p53i1	0	0	0	(L1) A subprogram group type can contain provides and requires subprogram access, and provides and requires subprogram access connections subclauses.	0
Subprogram Group	p53i2	0	0	0	(L2) A subprogram group implementation can contain abstract, data, subprogram group, and subprogram subcomponents subclauses.	0
Subprogram Group	p53i3	0	0	0	(L3) A subprogram group type or implementation may contain zero or more subcomponent declarations.	0
Threads	p54i1	0	0	0	(L1) A thread type declaration can contain port, feature group, requires data access declarations, as well as provides and requires data access connections subclauses.	0
Threads	p54i2	0	0	0	(L2) A thread component implementation can contain abstract, data, subprogram, and subprogram group subclauses.	0
Threads	p54i3	0	0	0	(L3) The Complete out event port, and Error out event data port are predeclared, i.e., are implicitly identified by the language.	0
Threads	p54c3	0	0	0	(C3) Either the Compute_Entrypoint, Compute_Entrypoint_Source_Text Compute_Entrypoint_Call_Sequence, or the Compute_Entrypoint_Call_Sequence property must be present in a thread component implementation.	0
Threads	p54c4	0	0	0	(C4) The Period property must have a value if the Dispatch_Protocol property value is periodic, sporadic, or event-driven.	0
Thread Groups	p55i1	0	0	0	(L1) A thread group component type can contain provides and requires data access, as well as port, feature group, and subprogram subclauses.	0
Thread Groups	p55i2	0	0	0	(L2) A thread group component implementation can contain abstract, data, subprogram, subprogram group, and subprogram subclauses.	0
Thread Groups	p55i3	0	0	0	(L3) A thread group implementation can contain a connections subclause, a flows subclause, a modes subclause, and a properties subclause.	0
Thread Groups	p55i4	0	0	0	(L4) A thread group must not contain a subprogram calls subclause.	0
Processes	p56i1	0	0	0	(L1) A process component type can contain port, feature group, provides and requires data access, provides and requires data access connections, and subprogram subclauses.	0
Processes	p56i2	0	0	0	(L2) A process component implementation can contain abstract, data, subprogram, subprogram group, and subprogram subclauses.	0
Processes	p56i3	0	0	0	(L3) A process implementation can contain a connections subclause, a flows subclause, a modes subclause, and a properties subclause.	0
Processes	p56i4	0	0	0	(L4) A thread group must not contain a subprogram calls subclause.	0
Processes	p56c1	0	0	0	(C1) The complete source text associated with a process component must form a complete and legal program.	0
Processors	p61i1	0	0	0	(L1) A processor component type can contain port, feature group, provides subprogram access, provides subprogram access connections, and subprogram subclauses.	0
Processors	p61i2	0	0	0	(L2) A processor component implementation can contain declarations of memory, bus, virtual bus, virtual processor, and subprogram subclauses.	0
Processors	p61i3	0	0	0	(L3) A processor implementation can contain a modes subclause, flows subclause, and a properties subclause.	0
Processors	p61i4	0	0	0	(L4) A processor implementation can contain bus access, subprogram access, subprogram group access, and subprogram subclauses.	0
Processors	p61i5	0	0	0	(L5) A processor implementation must not contain a subprogram calls subclause.	0
Virtual Processors	p62i1	0	0	0	(L1) A virtual processor component type can contain port, feature group, provides subprogram access, provides subprogram access connections, and subprogram subclauses.	0
Virtual Processors	p62i2	0	0	0	(L2) A virtual processor component implementation can contain declarations of virtual bus, virtual processor, and subprogram subclauses.	0
Virtual Processors	p62i3	0	0	0	(L3) A virtual processor implementation can contain a modes subclause, flows subclause, and a properties subclause.	0
Virtual Processors	p62i4	0	0	0	(L4) A virtual processor implementation must not contain a subprogram calls subclause.	0
Virtual Processors	p62i5	0	0	0	(L5) A virtual processor implementation can contain subprogram access, subprogram group access, port access, and subprogram subclauses.	0
Virtual Processors	p62c1	0	0	0	(C1) In a fully bound system every virtual processor must be directly or indirectly bound to, or directly or indirectly bound to, a processor component.	0

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Virtual Processors	p62c2	0	0	0	(C2) In a fully deployed system a requires virtual bus binding of a virtual processor specified by the Reqs	0
Memory	p63i1	0	0	0	(L1) A memory type can contain bus access declarations, feature groups, a modes subclause, and property associations.	0
Memory	p63i2	0	0	0	(L2) A memory implementation can contain abstract, memory, and bus subcomponent declarations.	0
Memory	p63i3	0	0	0	(L3) A memory implementation can contain a modes subclause and property associations.	0
Memory	p63i4	0	0	0	(L4) A memory implementation can contain bus access connection declarations. Bus access connections	0
Memory	p63i5	0	0	0	(L5) A memory implementation must not contain flows subclause, or subprogram calls subclause.	0
Buses	p64i1	0	0	0	(L1) A bus type can have requires bus access declarations, a modes subclause, and property associations.	0
Buses	p64i2	0	0	0	(L2) A bus type must not contain any flow specifications.	0
Buses	p64i3	0	0	0	(L3) A bus implementation can contain virtual bus and abstract subcomponent declarations.	0
Buses	p64i4	0	0	0	(L4) A bus implementation can contain a modes subclause and property associations.	0
Buses	p64i5	0	0	0	(L5) A bus implementation must not contain flows subclause, or subprogram calls subclause.	0
Virtual Buses	p65i1	0	0	0	(L1) A virtual bus type can have property associations.	0
Virtual Buses	p65i2	0	0	0	(L2) A virtual bus type must not contain flow specifications.	0
Virtual Buses	p65i3	0	0	0	(L3) A virtual bus implementation can contain virtual bus subcomponent declarations.	0
Virtual Buses	p65i4	0	0	0	(L4) A virtual bus implementation can contain a modes subclause and property associations.	0
Virtual Buses	p65i5	0	0	0	(L5) A virtual bus implementation must not contain a connections subclause, flows subclause, or subprogram calls subclause.	0
Virtual Buses	p65c1	0	0	0	(C1) In a fully deployed system virtual buses must be directly or indirectly bound to processors or buses that	0
Devices	p66i1	0	0	0	(L1) A device type can contain port, feature group, provides subprogram access, provides subprogram group	0
Devices	p66i2	0	0	0	(L2) A device component implementation must not contain a subprogram calls subclause.	0
Devices	p66i3	0	0	0	(L3) A device implementation can contain abstract, data, virtual bus, and bus subcomponents, bus access	0
Systems	p71i1	0	0	0	(L1) A system component type can contain subprogram, subprogram group, data and bus access declarations.	0
Systems	p71i2	0	0	0	(L2) A system component implementation can contain abstract, data, subprogram, subprogram group, port	0
Systems	p71i3	0	0	0	(L3) A system implementation can contain a modes subclause, a connections subclause, a flows subclause	0
Systems	p71i4	0	0	0	(L4) A thread group must not contain a subprogram calls subclause.	0
Systems	p71n1	0	0	0	(N1) The defining identifier of a feature must be unique within the namespace of the associated component	0
Systems	p71n2	0	0	0	(N2) Thread features may not be declared using the predeclared ports names Complete or Error.	0
Systems	p71n3	0	0	0	(N3) Each refining feature identifier that appears in a feature refinement declaration must also appear in a	0
Systems	p71n4	0	0	0	(N4) A feature is referenced in one of two ways. Within the component implementations for a component	0
Systems	p71n5	0	0	0	(N5) The path of a contained property association for a feature must refer to an element of a feature group	0
Systems	p71i1	0	0	0	(L1) Each feature can be refined at most once in the same type extension.	0
Systems	p71i2	0	0	0	(L2) A feature refinement declaration of a feature and the original feature must both be declared as port, p	0
Systems	p71i3	0	0	0	(L3) Feature arrays must only be declared for threads, devices, and processors.	0
Systems	p71i4	0	0	0	(L4) If the feature refinement specifies an array dimension, then the feature being refined must have an a	0
Systems	p71i5	0	0	0	(L5) If the refinement specifies an array dimension size, then the feature being refined must not have an s	0
Systems	p71i6	0	0	0	(L6) A contained property association must only be used when the feature is a feature group.	0
Systems	p71i7	0	0	0	(L7) In the case of a feature with a classifier reference, the classifier of the refined feature declaration in a	0
Abstract Features	p81i1	0	0	0	(L1) The feature direction in a refined feature declaration must be identical to the feature direction in the fi	0
Abstract Features	p81i2	0	0	0	(L2) If the direction of an abstract feature is specified, then the direction must be satisfied by the refine	0
Abstract Features	p81i3	0	0	0	(L3) An abstract feature with a feature prototype identifier and the prototype being referenced must both s	0
Abstract Features	p81i4	0	0	0	(L4) An abstract feature refinement declaration of a feature with a feature prototype reference must only s	0
Feature Groups an	p82n1	0	0	0	(N1) The defining identifier of a feature group type must be unique within the package namespace of the i	0
Feature Groups an	p82n2	0	0	0	(N2) Each feature group type provides a local namespace. The defining identifiers of prototype, feature, a	0
Feature Groups an	p82n3	0	0	0	(N3) The local namespace of a feature group type extension includes the defining identifiers in the local n	0
Feature Groups an	p82n4	0	0	0	(N4) The defining feature identifiers of feature group declarations must be unique in the local name space	0
Feature Groups an	p82n5	0	0	0	(N5) The defining feature group identifier of feature_refinement declarations in component types must exi	0
Feature Groups an	p82n6	0	0	0	(N6) The package name of the unique feature group type reference must refer to a package name in the i	0
Feature Groups an	p82n7	0	0	0	(N7) The prototype reference in a feature group declaration must refer to a prototype of the component ty	0
Feature Groups an	p82i1	0	0	0	(L1) A feature group type may contain zero or more elements, i.e., feature or feature groups. If it contains	0
Feature Groups an	p82i2	0	0	0	(L2) A feature group type can be declared to be the inverse of another feature group type, as indicated by	0
Feature Groups an	p82i3	0	0	0	(L3) Only feature group types without inverse of or feature group types with features and inverse of can b	0
Feature Groups an	p82i4	0	0	0	(L4) A feature group type that is an extension of another feature group type without an inverse of cannot c	0
Feature Groups an	p82i5	0	0	0	(L5) The feature group type that is an extension of another feature group type with features and inverse o	0
Feature Groups an	p82i6	0	0	0	(L6) A feature group declaration with an inverse of statement must only reference feature group types with	0
Feature Groups an	p82i7	0	0	0	(L7) A feature group refinement may be refined to only add property associations. In this case inclusion o	0

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Feature Groups an p82i8		0	0		0	(L8) The number of feature or feature groups contained in the feature group and its complement must be	0
Feature Groups an p82i9		0	0		0	(L9) Each of the declared features or feature groups in a feature group must be a pair-wise complement v	0
Feature Groups an p82i10		0	0		0	(L10) If both feature group types have zero features, then they are considered to complement each other;	0
Feature Groups an p82i11		0	0		0	(L11) Ports are pair-wise complementary if they satisfy the port connection rules specified in Section 9.2.1	0
Feature Groups an p82i12		0	0		0	(L12) Access features are pair-wise complementary if they satisfy the access connection rules in Section 9	0
Feature Groups an p82i13		0	0		0	(L13) If an in or out direction is specified as part of a feature group declaration, then all features inside the	0
							0
Ports p83n1		0	0		0	(N1) A defining port identifier must adhere to the naming rules specified for all features (see Section 8).	0
Ports p83n2		0	0		0	(N2) The defining identifier of a port refinement declaration must also appear in a feature declaration of a	0
Ports p83n3		0	0		0	(N3) The unique component type identifier of the data classifier reference must be the name of a data cor	0
Ports p83n4		0	0		0	(N4) The prototype identifier of a prototype reference, if specified, must exist in the namespace of the con	0
Ports p83i1		0	0		0	(L1) Ports can be declared in subprogram, thread, thread group, process, system, processor, virtual proc	0
Ports p83i2		0	0		0	(L2) Data and event data ports may be incompletely defined by not specifying the data component classif	0
Ports p83i3		0	0		0	(L3) Data, event, and event data ports may be refined by adding a property association. The data compo	0
Ports p83i4		0	0		0	(L4) The port category of a port refinement must be the same as the category of the port being refined, or	0
Ports p83i5		0	0		0	(L5) The port direction of a port refinement must be the same as the direction of the feature being refined.	0
							0
Subprogram and S p84n1		0	0		0	(N1) The defining identifier of a provides or requires subprogram or subprogram group access declaratio	0
Subprogram and S p84n2		0	0		0	(N2) The defining identifier of a provides or requires subprogram or subprogram group refinement must e	0
Subprogram and S p84n3		0	0		0	(N3) The component type identifier or component implementation name of a subprogram or subprogram g	0
Subprogram and S p84n4		0	0		0	(N4) The prototype identifier of a subprogram or subprogram group access classifier reference, if present	0
Subprogram and S p84i1		0	0		0	(L1) If a subprogram access refers to a component classifier or a component prototype, then the category	0
Subprogram and S p84i2		0	0		0	(L2) If a subprogram group access refers to a component classifier or a component prototype, then the ca	0
Subprogram and S p84i3		0	0		0	(L3) An abstract feature can be refined into a subprogram access or a subprogram group access. In this c	0
Subprogram and S p84i4		0	0		0	(L4) A subprogram or subprogram group access declaration that does not specify a component classifier	0
Subprogram and S p84i5		0	0		0	(L5) A subprogram or subprogram group access declaration may be refined by adding a property associa	0
Subprogram and S p84i6		0	0		0	(L6) A provides subprogram access cannot be refined to a requires subprogram access and a requires su	0
Subprogram and S p84c1		0	0		0	(C1) A provides subprogram access feature indicates that a subprogram is made available to be reference	0
							0
Subprogram Param p85n1		0	0		0	(N1) The defining identifier of a parameter must be unique within the namespace of the subprogram type	0
Subprogram Param p85n2		0	0		0	(N2) The defining parameter identifier of a parameter refinement declaration must also appear in a featur	0
Subprogram Param p85n3		0	0		0	(N3) The data classifier reference must refer to a data component type or a data component implementa	0
Subprogram Param p85n4		0	0		0	(N4) The prototype identifier, if present, must exist in the namespace of the subprogram classifier that cor	0
Subprogram Param p85i1		0	0		0	(L1) Parameters can be declared for subprogram component types.	0
Subprogram Param p85i2		0	0		0	(L2) A parameter declaration that does not specify a data classifier reference is incomplete. Such a refere	0
Subprogram Param p85i3		0	0		0	(L3) A parameter declaration may be refined by adding a property association. Inclusion of the data class	0
Subprogram Param p85i4		0	0		0	(L4) The parameter direction of a parameter refinement must be the same as the direction of the feature t	0
							0
Data Component A p86n1		0	0		0	(N1) The defining identifier of a provides or requires data access declaration must be unique within the na	0
Data Component A p86n2		0	0		0	(N2) The defining identifier of a provides or requires data access refinement must exist as a defining iden	0
Data Component A p86n3		0	0		0	(N3) The component type identifier or component implementation name of a data access classifier referen	0
Data Component A p86n4		0	0		0	(N4) The prototype identifier, if present, must exist in the namespace of the classifier that contains the da	0
Data Component A p86i1		0	0		0	(L1) If a data access refers to a component classifier or a component prototype, then the category of the i	0
Data Component A p86i2		0	0		0	(L2) A data access declaration may be refined by refining the data classifier, by adding a property associ	0
Data Component A p86i3		0	0		0	(L3) A provides data access cannot be refined to a requires data access and a requires data access cann	0
Data Component A p86i4		0	0		0	(L4) An abstract feature can be refined into a data access. In this case, the abstract feature must not hav	0
Data Component A p86c1		0	0		0	(C1) A data access declaration that does not specify a data classifier reference is incomplete. Such a refe	0
Data Component A p86c2		0	0		0	(C2) If the source code of a component does access shared data, then the component type declaration mi	0
Data Component A p86c3		0	0		0	(C3) A data access refinement may refine an abstract feature declaration. If the abstract feature declarati	0
							0
Bus Component Ac p87n1		0	0		0	(N1) The defining identifier of a provides or requires bus access declaration must be unique within the na	0
Bus Component Ac p87n2		0	0		0	(N2) The defining identifier of a provides or requires bus refinement must exist as a defining identifier of a	0
Bus Component Ac p87n3		0	0		0	(N3) The component type identifier or component implementation name of a bus access classifier referen	0
Bus Component Ac p87n4		0	0		0	(N4) The prototype identifier, if present, must exist in the namespace of the classifier that contains the bu	0
Bus Component Ac p87i1		0	0		0	(L1) If a bus access refers to a component classifier or a component prototype, then the category of the c	0
Bus Component Ac p87i2		0	0		0	(L2) A bus access declaration may be refined by refining the bus classifier, by adding a property associat	0
Bus Component Ac p87i3		0	0		0	(L3) A provides bus access cannot be refined to a requires bus access and a requires bus access cannot	0
Bus Component Ac p87i4		0	0		0	(L4) An abstract feature can be refined into a bus access. In this case, the abstract feature must not have	0
Bus Component Ac p87c1		0	0		0	(C1) A bus access declaration that does not specify a bus classifier reference is incomplete. Such a refere	0
Bus Component Ac p87c2		0	0		0	(C2) If a bus access feature is a refinement of an abstract feature, then the direction of the abstract featur	0
Bus Component Ac p87n1		0	0		0	(N1) The defining identifier of a defined connection declaration must be unique in the local namespace of	0

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Bus Component Ac p87n2	0	0	0	(N2) The connection identifier in a connection refinement declaration must refer to a named connection d	0
Bus Component Ac p87l1	0	0	0	(L1) A connection refinement must contain at least one of the following: a connection source and destinat	0
Bus Component Ac p87l2	0	0	0	(L2) If a semantic connection may be active in a particular mode, then the ultimate source and ultimate de	0
Bus Component Ac p87l3	0	0	0	(L3) If a semantic connection may be active in a particular mode transition, then the ultimate source con	0
Feature Connector p91n1	0	0	0	(N1) A source or destination reference in a feature connection or feature connection refinement declar	0
Feature Connector p91n2	0	0	0	(N2) The subcomponent reference may refer to a subcomponent or a subcomponent array.	0
Feature Connector p91l1	0	0	0	(L1) If the feature connection declaration represents a connection between features of sibling component	0
Feature Connector p91l2	0	0	0	(L2) If the feature connection declaration represents a connection between features up the containment h	0
Feature Connector p91l3	0	0	0	(L3) If the feature connection declaration represents a connection between features down the containme	0
Feature Connector p91l4	0	0	0	(L4) If the feature connection declaration specifies a directional connection, then the direction of the con	0
Feature Connector p91l5	0	0	0	(L5) The individual connections of a semantic connection must be bidirectional or have the same direct	0
Port Connections p92n1	0	0	0	(N1) The connection identifier in a port connection refinement declaration must refer to a named port or fe	0
Port Connections p92n2	0	0	0	(N2) A source or destination reference in a port connection or port connection refinement declaration mus	0
Port Connections p92n3	0	0	0	(N3) The subcomponent reference may also consist of a reference to a subcomponent array.	0
Port Connections p92n4	0	0	0	(N4) The event_or_event_data identifier of event source specifications (self.event_or_event_data_identi	0
Port Connections p92l1	0	0	0	(L1) In the case of a directional port connection the connection end representing the source of the flow m	0
Port Connections p92l2	0	0	0	(L2) In the case of a bidirectional port connection either connection end can be the source. If the bidirect	0
Port Connections p92l3	0	0	0	(L3) If the source connection end is a data access feature it must have read access rights; if the destinat	0
Port Connections p92l4	0	0	0	(L4) The feature identifier of a subcomponent reference may refer to a feature array, if the subcomponent	0
Port Connections p92l5	0	0	0	(L5) The following are acceptable sources and destinations of port connections. The left column shows co	0
Port Connections p92l6	0	0	0	(L6) If the port connection declaration represents a connection between ports of sibling components, then	0
Port Connections p92l7	0	0	0	(L7) If the port connection declaration represents a connection between ports up the containment hierar	0
Port Connections p92l8	0	0	0	(L8) If the port connection declaration represents a connection between ports down the containment hie	0
Port Connections p92l9	0	0	0	(L9) The individual connections of a semantic port connection must be bidirectional or have the same dire	0
Port Connections p92l10	0	0	0	(L10) Self-<identifier> must only be referenced as the source of a connection.	0
Port Connections p92l11	0	0	0	(L11) A data port cannot be the destination of more than one semantic port connection unless each sema	0
Port Connections p92l12	0	0	0	(L12) A semantic connection cannot contain connection declarations with both immediate and delayed Tim	0
Port Connections p92l13	0	0	0	(L13) For connections between data ports, event data ports and data access, the data classifier of the sou	0
Port Connections p92l14	0	0	0	(L14) The following rules are supported: aT5:y aT5:y aT5:y Classifier_Match: The source data type and c	0
Port Connections p92l15	0	0	0	(L15) If more than one port connection declaration in a semantic port connection has a property associat	0
Port Connections p92l16	0	0	0	(L16) A processor port specification must only be used in event connections within threads and subprogra	0
Port Connections p92c1	0	0	0	(C1) There cannot be cycles of immediate connections between threads, devices, and processors.	0
Port Connections p92c2	0	0	0	(C2) The processor port identifier of a processor port specification (processor.processor_port_identifier) m	0
Port Connections p92c3	0	0	0	(C3) The Supports_Classifier_Subset_Matches property may be associated with a bus or virtual bus. This	0
Port Connections p92c4	0	0	0	(C4) The Supports_Type_Conversions property may be associated with a bus or virtual bus. This specifie	0
Parameter Connec p93n1	0	0	0	(N1) The connection identifier in a parameter connection refinement declaration must refer to a named pa	0
Parameter Connec p93n2	0	0	0	(N2) A source (destination) reference in a parameter connection declaration must reference a parameter	0
Parameter Connec p93l1	0	0	0	(L1) The source of a parameter connection must be an incoming data or event data port of the containi	0
Parameter Connec p93l2	0	0	0	(L2) The following source/destination pairs are acceptable for parameter connection declarations: thread;	0
Parameter Connec p93l3	0	0	0	(L3) A parameter cannot be the destination feature reference of more than one parameter connection dec	0
Parameter Connec p93l4	0	0	0	(L4) The data classifier of the source and destination must match. The matching rules as specified by the	0
Access Connection p94n1	0	0	0	(N1) The connection identifier in an access connection refinement declaration must refer to a named acc	0
Access Connection p94n2	0	0	0	(N2) An access reference in an access connection declaration must reference an access feature of a sub	0
Access Connection p94l1	0	0	0	(L1) The category of the source and the destination of a access connection declaration must be the same	0
Access Connection p94l2	0	0	0	(L2) In the case of a bidirectional semantic access connection either connection end can be the source.	0
Access Connection p94l3	0	0	0	(L3) In the case of a directional data or bus access connection the connection end representing the comp	0
Access Connection p94l4	0	0	0	(L4) In a partial AADL model the ultimate source or destination may be a provides access feature of a cor	0
Access Connection p94l5	0	0	0	(L5) If the access connection declaration represents an access connection between access features of sil	0
Access Connection p94l6	0	0	0	(L6) If the access connection declaration represents a feature mapping up the containment hierarchy, the	0
Access Connection p94l7	0	0	0	(L7) If the access connection declaration represents a feature mapping down the containment hierarchy, i	0
Access Connection p94l8	0	0	0	(L8) A requires access cannot be the source or destination feature reference of more than one access co	0
Access Connection p94l9	0	0	0	(L9) For access connections the classifier of the provider access must match to the classifier of the requi	0
Access Connection p94l10	0	0	0	(L10) If more than one access feature in a semantic access connection has an Access_Right property ass	0
Access Connection p94l11	0	0	0	(L11) The category of the access connection source and destination must be identical. If the component c	0
Feature Group Cor p95n1	0	0	0	(N1) The connection identifier in a feature group connection refinement declaration must refer to a featur	0
Feature Group Cor p95n2	0	0	0	(N2) A source or destination reference in a feature group connection declaration must reference a featur	0

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Feature Group Cor p95i1	0	0	0	(L1) If the feature group connection declaration represents a component connection between sibling com	0
Feature Group Cor p95i2	0	0	0	(L2) The Classifier_Matching_Rule property specifies the rule to be applied to match the feature group cl	0
Feature Group Cor p95i3	0	0	0	(L3) The following rules are supported for feature group connection declarations that represent a connect	0
Feature Group Cor p95i4	0	0	0	(L4) The following rules are supported for feature group connection declarations that represent a connect	0
Feature Group Cor p95i5	0	0	0	(L5) If the feature group connection declaration represents a connection between feature group of sibling	0
Feature Group Cor p95i6	0	0	0	(L6) If the feature group connection declaration represents a connection between feature groups up the o	0
Feature Group Cor p95i7	0	0	0	(L7) If the feature group connection declaration represents a connection between feature groups down th	0
Feature Group Cor p95i8	0	0	0	(L8) A feature group connection must be bidirectional or be consistent with the direction of the source anc	0