pointer:0x7f4296cd7010 SgSourceFile

root node

```
SgNode* p_parent: 0x252da60
bool p isModified: 0
bool p_containsTransformation: 0
Sq File Info* p startOfConstruct: 0x7f4296e96068
SgStringList p_originalCommandLineArgumentList: [pdfGenerator, -rose:OpenMP:ast_only, -c, parallelfor.c]
int p_verbose: 0
bool p_output_warnings: 0
bool p_C_only: 1
bool p_UPC_only: 0
bool p_UPCxx_only: 0
int p_upc_threads: 0
bool p C89 only: 0
bool p_C89_gnu_only: 0
bool p_C99_only: 1
bool p_C99_gnu_only: 1
bool p_Cxx_only: 0
bool p_C11_only: 0
bool p_C11_gnu_only: 0
bool p_Cxx0x_only: 0
bool p_Cxx11_only: 0
bool p_Cxx11_gnu_only: 0
bool p_C14_only: 0
bool p_C14_gnu_only: 0
bool p_Cxx14_only: 0
bool p_Cxx14_gnu_only: 0
bool p_Fortran_only: 0
bool p_F77_only: 0
bool p_F90_only: 0
bool p_F95_only: 0
bool p_F2003_only: 0
bool p_F2008_only: 0
bool p_CoArrayFortran_only: 0
bool p_Java_only: 0
bool p_X10_only: 0
bool p_PHP_only: 0
bool p_Python_only: 0
bool p_Cuda_only: 0
bool p_OpenCL_only: 0
bool p_requires_C_preprocessor: 0
bool p_binary_only: 0
SgFile::outputFormatOption enum p inputFormat: 2
SgFile::outputFormatOption_enum p_outputFormat : 2
SgFile::outputFormatOption_enum p_backendCompileFormat : 2
bool p_fortran_implicit_none: 0
bool p_openmp: 1
bool p openmp parse only: 0
bool p_openmp_ast_only: 1
bool p_openmp_lowering: 0
bool p_cray_pointer_support: 0
bool p_failsafe: 0
bool p output parser actions: 0
bool p_exit_after_parser : 0
bool p_skip_syntax_check: 0
bool p_relax_syntax_check : 0
bool p_skip_translation_from_edg_ast_to_rose_ast : 0
bool p_skip_transformation: 0
bool p_skip_unparse: 0
bool p_skipfinalCompileStep: 0
bool p_unparse_includes: 0
bool p_unparse_line_directives: 0
bool p_unparse_function_calls_using_operator_syntax: 0
```

pointer:0x7f4296e11120 SgGlobal /home/liao6/workspace/github/rose-ast.git/parallelfor.c 0:0 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f4296cd7010

```
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4296e960c0
Sg_File_Info* p_endOfConstruct : 0x7f4296e96118
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f4296dc6140
SgTypeTable* p_type_table: 0x25684a8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgDeclarationStatementPtrList p_declarations: <too long>: <too long>: [0x7f4296b2c010, 0x7f4296626010, 0x7f42966263e0, 0x7f429662600, 0x7f4296600, 0x7f4296600, 0x7f4296600, 0x7f4296600, 0x7f4296600, 0x7f429600, 0x7f429600, 0x7f429600, 0x7f429600, 0x7f4296000, 0x7f429600, 0x7f4296000, 0x7f4296000, 0x7f4296000, 0x7f4296000, 0x7f4296000, 0x7f4296000, 0x
```

```
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: main_0x7f4295e00d90
  Click here to go to the parent node
SqNode* p parent: 0x7f4296e11120
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b24d28
Sg_File_Info* p_endOfConstruct : 0x7f4295b24cd0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0x25a0080
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes: 0
std::string p_linkage:
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly: 0
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p_definingDeclaration: 0x7f4295e00d90
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f4295e009c0
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label:
SgName p_name: main
SgFunctionParameterList* p_parameterList: 0x7f4295f84990
SgFunctionModifier p_functionModifier : <too long>: <too long>: SgFunctionModifier(isUnknown() = false isDefault() = true isInline()
SgSpecialFunctionModifier p_specialFunctionModifier: <too long>: <too long>: SgSpecialFunctionModifier(isUnknown() = false isDefault()
SqTypePtrList p exceptionSpecification: []
bool p_named_in_end_statement: 0
std::string p_asm_name :
SgExprListExp* p_decoratorList : 0
SgFunctionType* p_type: 0x7f4296805a40
SgFunctionDefinition* p_definition: 0x7f42959ac010
bool p oldStyleDefinition: 0
SgScopeStatement* p_scope : 0x7f4296e11120
SgDeclarationStatement::template_specialization_enum p_specialization: 1
bool p_requiresNameQualificationOnReturnType: 0
std::string p_gnu_extension_section:
std::string p gnu extension alias:
SgDeclarationStatement::gnu_extension_visability_attribute_enum p_gnu_extension_visability: 1
int p_name_qualification_length : 0
bool p_type_elaboration_required: 0
bool p_global_qualification_required: 0
int p name qualification length for return type: 0
bool p_type_elaboration_required_for_return_type: 0
bool p_global_qualification_required_for_return_type : 0
bool p_prototypeIsWithoutParameters: 0
int p_gnu_regparm_attribute: -1
SgFunctionType* p type syntax: 0
bool p_type_syntax_is_available: 0
bool p_using_C11_Noreturn_keyword: 0
bool p_is_constexpr: 0
bool p_using_new_function_return_type_syntax: 0
SgFunctionParameterScope* p_functionParameterScope: 0
bool p_marked_as_edg_normalization: 0
```

pointer:0x7f4295e00d90 SgFunctionDeclaration

/home/liao6/workspace/github/rose-ast.git/parallelfor.c 5:1

pointer:0x7f4295f84990 SgFunctionParameterList /home/liao6/workspace/github/rose-ast.git/parallelfor.c 5:1 IsTransformation:0 IsOutputInCodeGeneration:0 Declaration mangled name: L1R

```
SgNode* p_parent : 0x7f4295e00d90
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b25040
Sg_File_Info* p_endOfConstruct : 0x7f4295b25098
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
unsigned int p_decl_attributes: 0
std::string p_linkage:
SgDeclarationModifier p_declarationModifier: <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = true isFrien
bool p_nameOnly: 0
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f4295f84990
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgInitializedNamePtrList p_args: []
```

pointer:0x7f42959ac010
SgFunctionDefinition
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 6:1
IsTransformation:0
IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f4295e00d90
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b24ee0
Sg_File_Info* p_endOfConstruct : 0x7f4295b24f38
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f4296dc64d0
SgTypeTable* p_type_table: 0x2568520
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body: 0x7f4295a41010
std::map<SgNode*,int> p_scope_number_list : []
```

pointer:0x7f4295a41010 SgBasicBlock /home/liao6/workspace/github/rose-ast.git/parallelfor.c 6:1 IsTransformation:0 IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f42959ac010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b24e30
Sg_File_Info* p_endOfConstruct : 0x7f4295b24e88
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f4296dc63a0
SgTypeTable* p_type_table: 0x25684f8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f429586b010, 0x7f429586b2a0, 0x7f429586b530, 0x2842920, 0x7f42952f6010]
std::string p_asm_function_body :
```

```
Click here to go to the parent node
SqNode* p parent: 0x7f4295a41010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b25250
Sg_File_Info* p_endOfConstruct : 0x7f4295b252a8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value : -1
unsigned int p decl attributes: 0
std::string p_linkage:
SqDeclarationModifier p_declarationModifier : <too long>: <too long>: SqDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly: 1
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p definingDeclaration: 0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f429586b010
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables : [0x7f4295b6edd8]
bool p_variableDeclarationContainsBaseTypeDefiningDeclaration: 0
SgDeclarationStatement::template_specialization_enum p_specialization: 1
bool p_requiresGlobalNameQualificationOnType: 0
std::string p_gnu_extension_section:
std::string p_gnu_extension_alias :
unsigned short p gnu extension initialization priority: 0
SgDeclarationStatement::gnu_extension_visability_attribute_enum p_gnu_extension_visability: 0
SgVariableDeclaration::gnu_extension_declaration_attributes_enum p_gnu_extension_declaration_attribute: 0
int p name qualification length: 0
bool p_type_elaboration_required: 0
bool p_global_qualification_required: 0
bool p_isAssociatedWithDeclarationList: 1
bool p_isFirstDeclarationOfDeclarationList: 1
bool p is thread local: 0
bool p_is_constexpr: 0
```

Declaration mangled name: _variable_declaration__variable_type_i_variable_name_main_0x7f4295e00d90__scope_

SgSS2

pointer:0x7f429586b010 SgVariableDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/parallelfor.c 7:3

```
pointer:0x7f4295b6edd8
SglnitializedName
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 7:3
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent : 0x7f429586b010
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f4295b251f8
Sg_File_Info* p_endOfConstruct : 0x7f4295b251a0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: i
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f429642c010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f429574d010
SgStorageModifier* p_storageModifier: 0x2fbb578
SgScopeStatement* p_scope : 0x7f4295a41010
SgInitializedName::preinitialization_enum p_preinitialization: 0
bool p isCoArray: 0
SqInitializedName::asm register name enum p register name code: 0
SgInitializedName::excess specifier enum p excess specifier: 0
std::string p register name string:
bool p_requiresGlobalNameQualificationOnType : 0
bool p_shapeDeferred: 0
bool p initializationDeferred: 0
unsigned long int p_gnu_attribute_initialization_priority: 0
std::string p gnu attribute named weak reference:
std::string p_gnu_attribute_named_alias :
std::string p_gnu_attribute_cleanup_function :
std::string p_gnu_attribute_section_name :
int p_gnu_attribute_alignment: -1
SqDeclarationModifier::gnu declaration visability enum p gnu attribute visability: 2
bool p_protected_declaration: 0
int p_name_qualification_length_for_type: 0
bool p_type_elaboration_required_for_type: 0
bool p_global_qualification_required_for_type: 0
bool p_hasArrayTypeWithEmptyBracketSyntax: 0
bool p_using_C11_Alignas_keyword: 0
SgNode* p_constant_or_type_argument_for_Alignas_keyword: 0
bool p using auto keyword: 0
bool p_using_device_keyword: 0
bool p is braced initialized: 0
```

```
Click here to go to the parent node
SqNode* p parent: 0x7f4295a41010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b25568
Sg_File_Info* p_endOfConstruct : 0x7f4295b255c0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value : -1
unsigned int p decl attributes: 0
std::string p_linkage:
SqDeclarationModifier p_declarationModifier : <too long>: <too long>: SqDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly: 1
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p definingDeclaration: 0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f429586b2a0
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables : [0x7f4295b6ef20]
bool p_variableDeclarationContainsBaseTypeDefiningDeclaration: 0
SgDeclarationStatement::template_specialization_enum p_specialization: 1
bool p requiresGlobalNameQualificationOnType: 0
std::string p_gnu_extension_section:
std::string p_gnu_extension_alias :
unsigned short p gnu extension initialization priority: 0
SgDeclarationStatement::gnu_extension_visability_attribute_enum p_gnu_extension_visability: 0
SgVariableDeclaration::gnu_extension_declaration_attributes_enum p_gnu_extension_declaration_attribute: 0
int p name qualification length: 0
bool p_type_elaboration_required: 0
bool p_global_qualification_required: 0
bool p_isAssociatedWithDeclarationList: 1
bool p_isFirstDeclarationOfDeclarationList: 1
bool p is thread local: 0
bool p_is_constexpr: 0
```

Declaration mangled name: _variable_declaration__variable_type__Ab_i_index_1000_Ae__variable_name_main_0x7f4295e00d90__sco

pointer:0x7f429586b2a0 SgVariableDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/parallelfor.c 7:3

```
pointer:0x7f4295b6ef20
SglnitializedName
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 7:3
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent: 0x7f429586b2a0
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f4295b25510
Sg_File_Info* p_endOfConstruct : 0x7f4295b254b8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: a
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f42956d3010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f429574d258
SgStorageModifier* p_storageModifier : 0x2fbb5a0
SgScopeStatement* p_scope : 0x7f4295a41010
SgInitializedName::preinitialization_enum p_preinitialization: 0
bool p isCoArray: 0
SqInitializedName::asm register name enum p register name code: 0
SgInitializedName::excess specifier enum p excess specifier: 0
std::string p register name string:
bool p_requiresGlobalNameQualificationOnType: 0
bool p_shapeDeferred: 0
bool p initializationDeferred: 0
unsigned long int p_gnu_attribute_initialization_priority: 0
std::string p gnu attribute named weak reference:
std::string p_gnu_attribute_named_alias :
std::string p_gnu_attribute_cleanup_function :
std::string p_gnu_attribute_section_name :
int p_gnu_attribute_alignment: -1
SqDeclarationModifier::gnu declaration visability enum p gnu attribute visability: 2
bool p_protected_declaration: 0
int p_name_qualification_length_for_type: 0
bool p_type_elaboration_required_for_type: 0
bool p_global_qualification_required_for_type: 0
bool p_hasArrayTypeWithEmptyBracketSyntax: 0
bool p_using_C11_Alignas_keyword: 0
SgNode* p_constant_or_type_argument_for_Alignas_keyword: 0
bool p using auto keyword: 0
bool p_using_device_keyword: 0
bool p is braced initialized: 0
```

```
Click here to go to the parent node
SqNode* p parent: 0x7f4295a41010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b25778
Sg_File_Info* p_endOfConstruct : 0x7f4295b257d0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value : -1
unsigned int p decl attributes: 0
std::string p_linkage:
SqDeclarationModifier p_declarationModifier : <too long>: <too long>: SqDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly: 1
bool p_forward: 0
bool p_externBrace: 0
bool p_skipElaborateType: 0
SgDeclarationStatement* p definingDeclaration: 0
SgDeclarationStatement* p_firstNondefiningDeclaration: 0x7f429586b530
SgQualifiedNamePtrList p qualifiedNameList: []
std::string p binding label:
SgDeclarationStatement* p_baseTypeDefiningDeclaration: 0
SgInitializedNamePtrList p_variables : [0x7f4295b6f068]
bool p_variableDeclarationContainsBaseTypeDefiningDeclaration: 0
SgDeclarationStatement::template_specialization_enum p_specialization: 1
bool p_requiresGlobalNameQualificationOnType: 0
std::string p_gnu_extension_section:
std::string p_gnu_extension_alias :
unsigned short p gnu extension initialization priority: 0
SgDeclarationStatement::gnu_extension_visability_attribute_enum p_gnu_extension_visability: 0
SgVariableDeclaration::gnu_extension_declaration_attributes_enum p_gnu_extension_declaration_attribute: 0
int p name qualification length: 0
bool p_type_elaboration_required: 0
bool p_global_qualification_required: 0
bool p_isAssociatedWithDeclarationList: 0
bool p_isFirstDeclarationOfDeclarationList: 1
bool p is thread local: 0
bool p_is_constexpr: 0
```

Declaration mangled name: _variable_declaration__variable_type_i_variable_name_main_0x7f4295e00d90__scope_

SgSS2

pointer:0x7f429586b530 SgVariableDeclaration

IsOutputInCodeGeneration:0

IsTransformation:0

/home/liao6/workspace/github/rose-ast.git/parallelfor.c 8:3

```
pointer:0x7f4295b6f068
SglnitializedName
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 8:3
IsTransformation:0
IsOutputInCodeGeneration:0
```

```
SgNode* p parent : 0x7f429586b530
bool p isModified: 0
bool p containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f4295b25720
Sg_File_Info* p_endOfConstruct : 0x7f4295b256c8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
SqName p name: sum
std::string p_microsoft_uuid_string:
SgType* p_typeptr : 0x7f429642c010
SgInitializer* p initptr: 0
SgInitializedName* p_prev_decl_item: 0
bool p is initializer: 1
SgDeclarationStatement* p_declptr : 0x7f429574d4a0
SgStorageModifier* p_storageModifier : 0x2fbb5c8
SgScopeStatement* p_scope : 0x7f4295a41010
SgInitializedName::preinitialization_enum p_preinitialization: 0
bool p isCoArray: 0
SqInitializedName::asm register name enum p register name code: 0
SgInitializedName::excess specifier enum p excess specifier: 0
std::string p register name string:
bool p_requiresGlobalNameQualificationOnType: 0
bool p_shapeDeferred: 0
bool p_initializationDeferred: 0
unsigned long int p_gnu_attribute_initialization_priority: 0
std::string p_gnu_attribute_named_weak_reference :
std::string p_gnu_attribute_named_alias :
std::string p_gnu_attribute_cleanup_function :
std::string p_gnu_attribute_section_name :
int p_gnu_attribute_alignment: -1
SqDeclarationModifier::gnu declaration visability enum p gnu attribute visability: 2
bool p_protected_declaration: 0
int p_name_qualification_length_for_type: 0
bool p_type_elaboration_required_for_type: 0
bool p_global_qualification_required_for_type: 0
bool p_hasArrayTypeWithEmptyBracketSyntax: 0
bool p_using_C11_Alignas_keyword: 0
SgNode* p_constant_or_type_argument_for_Alignas_keyword: 0
bool p using auto keyword: 0
bool p_using_device_keyword: 0
bool p is braced initialized: 0
```

pointer:0x2842920 SgOmpParallelStatement /home/liao6/workspace/github/rose-ast.git/parallelfor.c 9:1 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f4295a41010

bool p_isModified : 1

bool p_containsTransformation: 0

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1 SgStatement* p_body : 0x27d2870

SgOmpClausePtrList p_clauses : [0x2e02f20]

pointer:0x27d2870 SgOmpForStatement /home/liao6/workspace/github/rose-ast.git/parallelfor.c 9:1 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x2842920

bool p_isModified : 1

bool p_containsTransformation : 0

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1 SgStatement* p_body : 0x7f4295504010

SgOmpClausePtrList p_clauses : [0x26ad730, 0x7f42952c3010, 0x7f42a2a1b010]

pointer:0x7f4295504010 SgForStatement /home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:3 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

```
SgNode* p_parent : 0x27d2870
bool p isModified: 0
bool p_containsTransformation: 0
Sg File Info* p startOfConstruct: 0x7f4295b27038
Sg_File_Info* p_endOfConstruct : 0x7f4295b27090
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0x28ac480
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f4296dc6600
SgTypeTable* p_type_table: 0x2568548
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgForInitStatement* p_for_init_stmt : 0x7f42954cd080
SgStatement* p_test : 0x7f4295434070
SgExpression* p_increment : 0x7f42953ca010
SgStatement* p loop body: 0x7f4295a41128
SgStatement* p_else_body: 0
std::string p_string_label:
```

AstAttributes:

OmpAttributeList: 0x28370c0

pointer:0x7f42954cd080 SgForInitStatement /home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:8 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f4295504010

bool p_isModified: 0

bool p_containsTransformation: 0

\$CLASSNAME* p_freepointer : 0xfffffffffffff

Sg_File_Info* p_startOfConstruct : 0x7f4295b25d50 Sg_File_Info* p_endOfConstruct : 0x7f4295b25da8

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1

SgStatementPtrList p_init_stmt : [0x7f4295434010]

pointer:0x7f4295434010 SgExprStatement /home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:8 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f42954cd080

bool p_isModified : 0

bool p_containsTransformation: 0

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1

SgExpression* p_expression: 0x7f4295463010

pointer:0x7f4295463010 SgAssignOp /home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

SgExpression* p_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f4295434010
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b25bf0
Sg_File_Info* p_endOfConstruct : 0x7f4295b25c48
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f4295b25ae8
SgExpression* p_lhs_operand_i : 0x7f429549a010
SgExpression* p_rhs_operand_i : 0x7f429571a078
SgType* p_expression_type : 0
```

pointer:0x7f429549a010
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:8
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f4295463010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f4295b259e0 Sg_File_Info* p_endOfConstruct : 0x7f4295b25a38 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 1 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f4295b25828 SgVariableSymbol* p_symbol : 0x30207d0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f429571a078
SgIntVal
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:10
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

std::string p_valueString: 0

SgNode* p_parent: 0x7f4295463010
bool p_isModified: 0
bool p_containsTransformation: 0
\$CLASSNAME* p_freepointer: 0xfffffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f4295b25a90
Sg_File_Info* p_endOfConstruct: 0x7f4295b25988
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f4295b25b40
SgExpression* p_originalExpressionTree: 0
int p_value: 0

pointer:0x7f4295434070 SgExprStatement /home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:12 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f4295504010

bool p_isModified : 0

bool p_containsTransformation: 0

\$CLASSNAME* p_freepointer : 0xfffffffffffff

Sg_File_Info* p_startOfConstruct : 0x7f4295b26118 Sg_File_Info* p_endOfConstruct : 0x7f4295b26170

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1

SgExpression* p_expression: 0x7f42953fd010

pointer:0x7f42953fd010 SgLessThanOp /home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:13 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

SgExpression* p_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f4295434070
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f4295b26068
Sg_File_Info* p_endOfConstruct : 0x7f4295b260c0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f4295b25f60
SgExpression* p_lhs_operand_i : 0x7f429549a078
SgExpression* p_rhs_operand_i: 0x7f429571a0e0
SgType* p_expression_type : 0
```

pointer:0x7f429549a078
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:12
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f42953fd010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f4295b25e58 Sg_File_Info* p_endOfConstruct : 0x7f4295b25eb0 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f4295b25880 SgVariableSymbol* p_symbol : 0x30207d0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f429571a0e0 SgIntVal /home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:14 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

std::string p_valueString: 1000

pointer:0x7f42953ca010 SgPlusPlusOp /home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:20 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

```
SgNode* p_parent : 0x7f4295504010
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f4295b26328
Sg_File_Info* p_endOfConstruct : 0x7f4295b26380
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f4295b25b98
SgExpression* p_operand_i : 0x7f429549a0e0
SgType* p_expression_type: 0
SgUnaryOp::Sgop_mode p_mode : 1
```

pointer:0x7f429549a0e0
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 10:19
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f42953ca010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f4295b26220 Sg_File_Info* p_endOfConstruct : 0x7f4295b26278 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 1 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f4295b26010 SgVariableSymbol* p_symbol : 0x30207d0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f4295a41128
SgBasicBlock
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 11:3
IsTransformation:0
IsOutputInCodeGeneration:0

```
SgNode* p_parent : 0x7f4295504010
bool p isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b263d8
Sg_File_Info* p_endOfConstruct : 0x7f4295b26430
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
SgLabelRefExp* p_numeric_label: 0
int p_source_sequence_value: -1
SgSymbolTable* p_symbol_table: 0x7f4296dc6730
SgTypeTable* p_type_table: 0x2568570
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements: [0x7f42954340d0, 0x7f4295434130]
std::string p_asm_function_body :
```

pointer:0x7f42954340d0 SgExprStatement /home/liao6/workspace/github/rose-ast.git/parallelfor.c 12:5 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f4295a41128

bool p_isModified : 0

bool p_containsTransformation: 0

Sg_File_Info* p_endOfConstruct : 0x7f4295b26c18

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1

SgExpression* p_expression: 0x7f4295463080

pointer:0x7f4295463080 SgAssignOp /home/liao6/workspace/github/rose-ast.git/parallelfor.c 12:9 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

SgExpression* p_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f42954340d0
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b26b10
Sg_File_Info* p_endOfConstruct : 0x7f4295b26b68
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f4295b26698
SgExpression* p_lhs_operand_i : 0x7f4295393010
SgExpression* p_rhs_operand_i : 0x7f429535c010
SgType* p_expression_type : 0
```

pointer:0x7f4295393010 SgPntrArrRefExp /home/liao6/workspace/github/rose-ast.git/parallelfor.c 12:6 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

SgExpression* p_originalExpressionTree : 0

SgNode* p_parent : 0x7f4295463080 bool p_isModified: 0 bool p_containsTransformation: 0 \$CLASSNAME* p_freepointer : 0xfffffffffffff Sg_File_Info* p_startOfConstruct : 0x7f4295b266f0 Sg_File_Info* p_endOfConstruct : 0x7f4295b26748 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 1 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f4295b262d0 SgExpression* p_lhs_operand_i: 0x7f429549a148 SgExpression* p_rhs_operand_i : 0x7f429549a1b0 SgType* p_expression_type : 0

pointer:0x7f429549a148
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 12:5
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int [1000]

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f4295393010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f4295b264e0 Sg_File_Info* p_endOfConstruct : 0x7f4295b26538 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f4295b261c8 SgVariableSymbol* p_symbol: 0x3020800 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f429549a1b0 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/parallelfor.c 12:7 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f4295393010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f4295b265e8 Sg_File_Info* p_endOfConstruct : 0x7f4295b26640 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f4295b26488 SgVariableSymbol* p_symbol : 0x30207d0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f429535c010
SgMultiplyOp
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 12:11
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

SgExpression* p_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f4295463080
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b26a08
Sg_File_Info* p_endOfConstruct : 0x7f4295b26a60
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f4295b26900
SgExpression* p_lhs_operand_i: 0x7f429549a218
SgExpression* p_rhs_operand_i: 0x7f429571a148
SgType* p_expression_type : 0
```

pointer:0x7f429549a218
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 12:10
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f429535c010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f4295b267f8 Sg_File_Info* p_endOfConstruct : 0x7f4295b26850 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f4295b26590 SgVariableSymbol* p_symbol : 0x30207d0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f429571a148
SgIntVal
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 12:12
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

SgNode* p_parent : 0x7f429535c010

bool p_isModified: 0
bool p_containsTransformation: 0
\$CLASSNAME* p_freepointer: 0xffffffffffff
Sg_File_Info* p_startOfConstruct: 0x7f4295b268a8
Sg_File_Info* p_endOfConstruct: 0x7f4295b267a0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f4295b26958
SgExpression* p_originalExpressionTree: 0
int p_value: 2
std::string p_valueString: 2

pointer:0x7f4295434130 SgExprStatement /home/liao6/workspace/github/rose-ast.git/parallelfor.c 13:5 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f4295a41128

bool p_isModified : 0

bool p_containsTransformation: 0

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1

SgExpression* p_expression: 0x7f4295325010

pointer:0x7f4295325010 SgPlusAssignOp /home/liao6/workspace/github/rose-ast.git/parallelfor.c 13:8 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

SgExpression* p_originalExpressionTree : 0

```
SgNode* p_parent : 0x7f4295434130
bool p_isModified: 0
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x7f4295b26ed8
Sg_File_Info* p_endOfConstruct : 0x7f4295b26f30
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f4295b26c70
SgExpression* p_lhs_operand_i : 0x7f429549a280
SgExpression* p_rhs_operand_i : 0x7f429549a2e8
SgType* p_expression_type : 0
```

pointer:0x7f429549a280 SgVarRefExp /home/liao6/workspace/github/rose-ast.git/parallelfor.c 13:5 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f4295325010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f4295b26cc8 Sg_File_Info* p_endOfConstruct : 0x7f4295b26d20 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 1 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f4295b26ab8 SgVariableSymbol* p_symbol: 0x3020830 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f429549a2e8
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/parallelfor.c 13:10
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f4295325010 bool p_isModified: 0 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x7f4295b26dd0 Sg_File_Info* p_endOfConstruct : 0x7f4295b26e28 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x7f4295b269b0 SgVariableSymbol* p_symbol : 0x30207d0 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x26ad730 SgOmpOrderedClause transformation 0:0 IsTransformation:1 IsOutputInCodeGeneration:1

Click here to go to the parent node

SgNode* p_parent : 0x27d2870

bool p_isModified : 1

bool p_containsTransformation : 0

 $\label{eq:linear_processing} A \\ tached \\ Preprocessing \\ Info \\ Pype^* \\ p_attached \\ Preprocessing \\ Info \\ Ptr: 0$

AstAttributeMechanism* p_attributeMechanism : 0

bool p_containsTransformationToSurroundingWhitespace: 0

pointer:0x7f42952c3010 SgOmpReductionClause transformation 0:0 IsTransformation:1 IsOutputInCodeGeneration:1

Click here to go to the parent node

SgNode* p_parent : 0x27d2870

bool p_isModified : 1

bool p_containsTransformation: 0

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

 ${\color{red}\textbf{bool}}\ p_contains Transformation To Surrounding White space: \textbf{0}$

SgVarRefExpPtrList p_variables : [0x7f429549a350]

 $SgOmpClause::omp_reduction_operator_enum\ p_operation: 1$

pointer:0x7f429549a350 SgVarRefExp transformation 0:0 IsTransformation:1 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

bool p_global_qualification_required: 0

SgNode* p_parent : 0x7f42952c3010 bool p_isModified: 1 bool p_containsTransformation: 0 Sg_File_Info* p_startOfConstruct : 0x279c1b8 Sg_File_Info* p_endOfConstruct : 0x279c210 AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0 AstAttributeMechanism* p_attributeMechanism: 0 bool p containsTransformationToSurroundingWhitespace: 0 bool p_need_paren: 0 bool p_lvalue: 0 bool p_global_qualified_name: 0 Sg_File_Info* p_operatorPosition: 0x279c268 SgVariableSymbol* p_symbol : 0x3020830 SgExpression* p_originalExpressionTree : 0 int p_name_qualification_length: 0 bool p_type_elaboration_required: 0

pointer:0x7f42a2a1b010 SgOmpScheduleClause transformation 0:0 IsTransformation:1 IsOutputInCodeGeneration:1

Click here to go to the parent node

SgNode* p_parent: 0x27d2870 bool p_isModified: 1

bool p_containsTransformation: 0

\$CLASSNAME* p_freepointer : 0xfffffffffffff Sg_File_Info* p_startOfConstruct : 0x279c2c0 Sg_File_Info* p_endOfConstruct : 0x279c318

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgOmpClause::omp_schedule_kind_enum p_kind: 2 SgExpression* p_chunk_size : 0x7f429571a280

pointer:0x7f429571a280 SgIntVal transformation 0:0 IsTransformation:1 IsOutputInCodeGeneration:1 Expression type: int

std::string p_valueString :

Click here to go to the parent node

pointer:0x2e02f20 SgOmplfClause transformation 0:0 IsTransformation:1 IsOutputInCodeGeneration:1

Click here to go to the parent node

SgNode* p_parent: 0x2842920

bool p_isModified : 1

bool p_containsTransformation: 0

 $\begin{tabular}{ll} Attached Preprocessing Info Type * p_attached Preprocessing Info Ptr: 0 \end{tabular}$

AstAttributeMechanism* p_attributeMechanism : 0

 ${\color{red}\textbf{bool}}\ p_contains Transformation To Surrounding White space: \textbf{0}$

SgExpression* p_expression: 0x7f429571a218

pointer:0x7f429571a218 SgIntVal transformation 0:0 IsTransformation:1 IsOutputInCodeGeneration:1 Expression type: int

Click here to go to the parent node

```
SgNode* p_parent : 0x7f4295595010
bool p_isModified: 1
bool p_containsTransformation: 0
Sg_File_Info* p_startOfConstruct : 0x279bad8
Sg_File_Info* p_endOfConstruct : 0x279bb30
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x279bb88
SgExpression* p_originalExpressionTree : 0
int p_value: 1
std::string p_valueString :
```

pointer:0x7f42952f6010 SgReturnStmt /home/liao6/workspace/github/rose-ast.git/parallelfor.c 15:3 IsTransformation:0 IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f4295a41010

bool p_isModified : 0

bool p_containsTransformation: 0

AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0

AstAttributeMechanism* p_attributeMechanism: 0

bool p_containsTransformationToSurroundingWhitespace: 0

SgLabelRefExp* p_numeric_label : 0 int p_source_sequence_value : -1

SgExpression* p_expression: 0x7f429571a1b0

pointer:0x7f429571a1b0 SgIntVal /home/liao6/workspace/github/rose-ast.git/parallelfor.c 15:10 IsTransformation:0 IsOutputInCodeGeneration:0 Expression type: int

Click here to go to the parent node

```
SgNode* p_parent : 0x7f42952f6010
bool p_isModified: 0
bool p_containsTransformation: 0
$CLASSNAME* p_freepointer : 0xfffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f4295b270e8
Sg_File_Info* p_endOfConstruct : 0x7f4295b26e80
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr: 0
AstAttributeMechanism* p_attributeMechanism: 0
bool p_containsTransformationToSurroundingWhitespace: 0
bool p_need_paren: 0
bool p_lvalue: 0
bool p_global_qualified_name: 0
Sg_File_Info* p_operatorPosition: 0x7f4295b27198
SgExpression* p_originalExpressionTree : 0
int p_value: 0
std::string p_valueString: 0
```