

DATASHEET

CWE Mapping - QAC

CWE ID	CWE Text	QAC Rule Group ID	QAC Rule Text
CWE-014	Compiler Removal of Code to Clear Buffers	3.11	Redundancy
CWE-014	Compiler Removal of Code to Clear Buffers	5.10	Redundancy
CWE-020	Improper Input Validation	5.5	Overflow and wraparound
CWE-120	Buffer Copy without Checking Size of Input ('Classic Buffer Overflow')	5.6	Arrays
CWE-121	Stack-based Buffer Overflow	5.6	Arrays
CWE-122	Heap-based Buffer Overflow	5.6	Arrays
CWE-124	Buffer Underwrite	5.6	Arrays
CWE-125	Out-of-bounds Read	5.6	Arrays
CWE-126	Buffer Over-read	5.6	Arrays
CWE-127	Buffer Under-read	5.6	Arrays
CWE-128	Wrap-around Error	5.5	Overflow and wraparound
CWE-129	Improper Validation of Array Index	5.6	Arrays
CWE-129	Improper Validation of Array Index	5.5	Overflow and wraparound
CWE-131	Incorrect Calculation of Buffer Size	5.6	Arrays
CWE-134	Uncontrolled Format String	7.2	Explicitly undefined
CWE-136	Type Errors	5.2	Conversion to unsigned
CWE-136	Type Errors	2.3	Arithmetic type - Balancing
CWE-136	Type Errors	3.1	Arithmetic type - Assignment
CWE-136	Type Errors	3.4	Arithmetic type - Operands
CWE-136	Type Errors	2.7	Arithmetic type - Operands
CWE-136	Type Errors	3.2	Arithmetic type - Balancing
CWE-136	Type Errors	2.5	Arithmetic type - Composite expressions
CWE-136	Type Errors	3.12	Switch statements
CWE-136	Type Errors	2.2	Arithmetic type - Assignment
CWE-136	Type Errors	2.4	Arithmetic type - Casts

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CWE-136	Type Errors	5.1	Conversion to signed
CWE-176	Improper Handling of Unicode Encoding	2.13	Constants
CWE-176	Improper Handling of Unicode Encoding	2.20	K+R compatibility
CWE-188	Reliance on Data/Memory Layout	7.2	Explicitly undefined
CWE-188	Reliance on Data/Memory Layout	1.7	Dataflow - NULL pointers
CWE-188	Reliance on Data/Memory Layout	8.1	Constraint violations
CWE-188	Reliance on Data/Memory Layout	2.23	Pointers
CWE-188	Reliance on Data/Memory Layout	1.5	Dataflow - Arrays
CWE-190	Integer Overflow or Wraparound	5.5	Overflow and wraparound
CWE-190	Integer Overflow or Wraparound	3.9	Pointers
CWE-191	Integer Underflow (Wrap or Wraparound)	5.5	Overflow and wraparound
CWE-192	Integer Coercion Error	5.1	Conversion to signed
CWE-192	Integer Coercion Error	2.3	Arithmetic type - Balancing
CWE-192	Integer Coercion Error	3.1	Arithmetic type - Assignment
CWE-192	Integer Coercion Error	3.2	Arithmetic type - Balancing
CWE-192	Integer Coercion Error	2.2	Arithmetic type - Assignment
CWE-192	Integer Coercion Error	5.2	Conversion to unsigned
CWE-192	Integer Coercion Error	2.6	Arithmetic type - Integral promotion
CWE-194	Unexpected Sign Extension	1.11	Arithmetic type - Implicit conversions
CWE-195	Signed to Unsigned Conversion Error	3.2	Arithmetic type - Balancing
CWE-195	Signed to Unsigned Conversion Error	2.3	Arithmetic type - Balancing
CWE-196	Unsigned to Signed Conversion Error	1.11	Arithmetic type - Implicit conversions
CWE-197	Numeric Truncation Error	2.2	Arithmetic type - Assignment
CWE-197	Numeric Truncation Error	5.2	Conversion to unsigned
CWE-197	Numeric Truncation Error	2.4	Arithmetic type - Casts
CWE-197	Numeric Truncation Error	5.4	Shift operations
CWE-233	Failure to Handle Missing Parameter	8.1	Constraint violations
CWE-234	Failure to Handle Extra Parameter	8.1	Constraint violations
CWE-252	Unchecked Return Value	2.18	Functions
CWE-369	Divide By Zero	5.5	Overflow and wraparound
CWE-389	Error Conditions, Return Values, Status Codes	2.18	Functions
CWE-391	Unchecked Error Condition	2.18	Functions

CWE ID	CWE Text	QAC Rule Group ID	QAC Rule Text
CWE-398	Indicator of Poor Code Quality	3.11	Redundancy
CWE-398	Indicator of Poor Code Quality	2.9	Bracing and Indentation
CWE-398	Indicator of Poor Code Quality	2.19	Identifiers
CWE-398	Indicator of Poor Code Quality	2.27	Side Effects
CWE-398	Indicator of Poor Code Quality	5.10	Redundancy
CWE-398	Indicator of Poor Code Quality	2.17	Enumerations
CWE-398	Indicator of Poor Code Quality	2.25	Readability
CWE-398	Indicator of Poor Code Quality	2.13	Constants
CWE-398	Indicator of Poor Code Quality	2.25	Readability
CWE-398	Indicator of Poor Code Quality	7.3	Implicitly undefined
CWE-398	Indicator of Poor Code Quality	2.23	Pointers
CWE-398	Indicator of Poor Code Quality	2.27	Side Effects
CWE-398	Indicator of Poor Code Quality	2.21	Macro Definition
CWE-398	Indicator of Poor Code Quality	2.16	Declarations and Definitions
CWE-398	Indicator of Poor Code Quality	2.24	Preprocessing
CWE-398	Indicator of Poor Code Quality	2.14	Control flow
CWE-398	Indicator of Poor Code Quality	2.18	Functions
CWE-452	Initialization and Cleanup Errors	2.16	Declarations and Definitions
CWE-452	Initialization and Cleanup Errors	8.1	Constraint violations
CWE-452	Initialization and Cleanup Errors	3.7	Declarations and definitions
CWE-452	Initialization and Cleanup Errors	2.20	K+R compatibility
CWE-452	Initialization and Cleanup Errors	2.1	Arrays, structures, unions and bit-fields
CWE-452	Initialization and Cleanup Errors	5.9	Unset data
CWE-452	Initialization and Cleanup Errors	2.17	Enumerations
CWE-452	Initialization and Cleanup Errors	1.10	Dataflow - Control flow
CWE-452	Initialization and Cleanup Errors	7.2	Explicitly undefined
CWE-456	Missing Initialization of a Variable	5.8	Unset data
CWE-457	Use of Uninitialized Variable	5.8	Unset data
CWE-465	Pointer Issues	5.6	Arrays
CWE-465	Pointer Issues	8.1	Constraint violations
CWE-465	Pointer Issues	5.7	Pointers
CWE-465	Pointer Issues	5.9	NULL pointers

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CWE-465	Pointer Issues	5.8	Unset data
CWE-465	Pointer Issues	2.22	Pointers
CWE-465	Pointer Issues	3.9	Pointers
CWE-466	Return of Pointer Value Outside of Expected Range	5.6	Arrays
CWE-467	Use of sizeof() on a Pointer Type	3.9	Pointers
CWE-468	Incorrect Pointer Scaling	2.23	Pointers
CWE-468	Incorrect Pointer Scaling	5.8	NULL pointers
CWE-469	Use of Pointer Subtraction to Determine Size	5.7	Pointers
CWE-469	Use of Pointer Subtraction to Determine Size	5.6	Arrays
CWE-469	Use of Pointer Subtraction to Determine Size	8.1	Constraint violations
CWE-474	Use of Function with Inconsistent Implementations	2.19	Identifiers
CWE-476	NULL Pointer Dereference	5.8	NULL pointers
CWE-478	Missing Default Case in Switch Statement	2.28	Switch statements
CWE-480	Use of Incorrect Operator	2.15	Control flow
CWE-480	Use of Incorrect Operator	3.11	Redundancy
CWE-481	Assigning instead of Comparing	3.5	Arithmetic type - Operations
CWE-481	Assigning instead of Comparing	2.15	Control flow
CWE-482	Comparing instead of Assigning	3.11	Redundancy
CWE-483	Incorrect Block Delimitation	2.9	Bracing and Indentation
CWE-484	Omitted Break Statement in Switch	2.28	Switch statements
CWE-547	Use of Hard-coded Security-relevant Constants	2.13	Constants
CWE-559	Often Misused: Arguments and Parameters	7.2	Explicitly undefined
CWE-559	Often Misused: Arguments and Parameters	3.8	Functions
CWE-561	Dead Code	5.12	Invariant operations
CWE-561	Dead Code	3.11	Redundancy
CWE-561	Dead Code	5.10	Redundancy
CWE-562	Return of Stack Variable Address	3.9	Pointers
CWE-563	Unused Variable	5.10	Redundancy
CWE-563	Unused Variable	3.11	Redundancy
CWE-563	Unused Variable	2.26	Redundancy
CWE-569	Expression Issues	3.5	Arithmetic type - Operations
CWE-569	Expression Issues	7.3	Implicitly undefined

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CWE-569	Expression Issues	2.26	Redundancy
CWE-569	Expression Issues	2.17	Enumerations
CWE-569	Expression Issues	2.19	Identifiers
CWE-569	Expression Issues	5.12	Invariant operations
CWE-569	Expression Issues	2.15	Control flow
CWE-569	Expression Issues	2.23	Pointers
CWE-569	Expression Issues	1.15	Miscellaneous
CWE-569	Expression Issues	3.11	Redundancy
CWE-569	Expression Issues	2.27	Side Effects
CWE-569	Expression Issues	0.6	Sub-Messages
CWE-569	Expression Issues	2.18	Functions
CWE-569	Expression Issues	2.24	Preprocessing
CWE-569	Expression Issues	2.21	Macro Definition
CWE-569	Expression Issues	5.10	Redundancy
CWE-569	Expression Issues	2.9	Bracing and Indentation
CWE-569	Expression Issues	8.1	Constraint violations
CWE-569	Expression Issues	2.13	Constants
CWE-569	Expression Issues	2.16	Declarations and Definitions
CWE-569	Expression Issues	2.28	Switch statements
CWE-569	Expression Issues	2.25	Readability
CWE-570	Expression is Always False	5.12	Invariant operations
CWE-571	Expression is Always True	5.1	Invariant operations
CWE-587	Assignment of a Fixed Address to a Pointer	8.1	Constraint violations
CWE-588	Attempt to Access Child of a Non-structure Pointer	2.23	Pointers
CWE-596	Incorrect Semantic Object Comparison	8.1	Constraint violations
CWE-597	Use of Wrong Operator in String Comparison	3.9	Pointers
CWE-628	Function Call with Incorrectly Specified Arguments	7.2	Explicitly undefined
CWE-628	Function Call with Incorrectly Specified Arguments	3.8	Functions
CWE-633	Weaknesses that Affect Memory	5.12	Invariant operations
CWE-633	Weaknesses that Affect Memory	7.2	Explicitly undefined
CWE-633	Weaknesses that Affect Memory	5.10	Redundancy
CWE-633	Weaknesses that Affect Memory	5.5	Overflow and wraparound

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CWE-633	Weaknesses that Affect Memory	5.6	Arrays
CWE-633	Weaknesses that Affect Memory	3.11	Redundancy
CWE-665	Improper Initialization	8.1	Constraint violations
CWE-665	Improper Initialization	2.17	Enumerations
CWE-665	Improper Initialization	7.2	Explicitly undefined
CWE-665	Improper Initialization	1.10	Dataflow - Control flow
CWE-665	Improper Initialization	3.7	Declarations and definitions
CWE-665	Improper Initialization	2.20	K+R compatibility
CWE-665	Improper Initialization	2.1	Arrays, structures, unions and bit-fields
CWE-670	Always-Incorrect Control Flow Implementation	3.12	Switch statements
CWE-670	Always-Incorrect Control Flow Implementation	5.13	Control flow
CWE-680	Integer Overflow to Buffer Overflow	5.5	Overflow and wraparound
CWE-681	Incorrect Conversion between Numeric Types	3.3	Arithmetic type - Casts
CWE-681	Incorrect Conversion between Numeric Types	3.4	Arithmetic type - Operands
CWE-681	Incorrect Conversion between Numeric Types	5.1	Conversion to signed
CWE-681	Incorrect Conversion between Numeric Types	3.5	Arithmetic type - Operations
CWE-681	Incorrect Conversion between Numeric Types	3.2	Arithmetic type - Balancing
CWE-681	Incorrect Conversion between Numeric Types	3.4	Arithmetic type - Operands
CWE-681	Incorrect Conversion between Numeric Types	3.5	Arithmetic type - Operations
CWE-681	Incorrect Conversion between Numeric Types	3.1	Arithmetic type - Assignment
CWE-681	Incorrect Conversion between Numeric Types	5.2	Conversion to unsigned
CWE-682	Incorrect Calculation	5.4	Shift operations
CWE-682	Incorrect Calculation	3.4	Arithmetic type - Operands
CWE-682	Incorrect Calculation	7.2	Explicitly undefined
CWE-682	Incorrect Calculation	3.2	Arithmetic type - Balancing
CWE-682	Incorrect Calculation	3.5	Arithmetic type - Operations
CWE-682	Incorrect Calculation	3.4	Arithmetic type - Operands
CWE-682	Incorrect Calculation	2.17	Enumerations
CWE-685	Function Call With Incorrect Number of Arguments	7.2	Explicitly undefined
CWE-686	Function Call With Incorrect Argument Type	1.13	Arithmetic type - Enum types
CWE-686	Function Call With Incorrect Argument Type	2.23	Pointers
CWE-686	Function Call With Incorrect Argument Type	2.2	Arithmetic type - Assignment

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CWE-686	Function Call With Incorrect Argument Type	7.2	Explicitly undefined
CWE-686	Function Call With Incorrect Argument Type	8.1	Constraint violations
CWE-686	Function Call With Incorrect Argument Type	3.8	Functions
CWE-690	Unchecked Return Value to NULL Pointer Dereference	5.8	NULL pointers
CWE-697	Insufficient Comparison	3.2	Arithmetic type - Balancing
CWE-697	Insufficient Comparison	8.1	Constraint violations
CWE-704	Incorrect Type Conversion or Cast	2.4	Arithmetic type - Casts
CWE-704	Incorrect Type Conversion or Cast	5.1	Conversion to signed
CWE-704	Incorrect Type Conversion or Cast	5.2	Conversion to unsigned
CWE-704	Incorrect Type Conversion or Cast	3.3	Arithmetic type - Casts
CWE-705	Incorrect Control Flow Scoping	2.15	Control flow
CWE-735	CERT C Secure Coding Section 01 - Preprocessor (PRE)	2.21	Macro Definition
CWE-735	CERT C Secure Coding Section 01 - Preprocessor (PRE)	2.24	Preprocessing
CWE-735	CERT C Secure Coding Section 01 - Preprocessor (PRE)	7.2	Explicitly undefined
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	3.8	Functions
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	3.11	Redundancy
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	5.12	Control flow
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	2.16	Declarations and Definitions
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	3.12	Switch statements
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	6.1	ISO C90 Conformance limits
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	2.19	Identifiers
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	7.2	Explicitly undefined
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	3.9	Pointers

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CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	6.4	Language extensions
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	2.18	Functions
CWE-736	CERT C Secure Coding Section 02 - Declarations and Initialization (DCL)	9.2	Syntax errors
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	2.15	Control flow
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	3.4	Arithmetic type - Operands
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	2.27	Side Effects
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	5.8	Unset data
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	7.2	Explicitly undefined
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	5.9	NULL pointers
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	3.8	Functions
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	2.23	Pointers
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	3.9	Pointers
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	3.5	Arithmetic type - Operations
CWE-737	CERT C Secure Coding Section 03 - Expressions (EXP)	8.1	Constraint violations
CWE-738	CERT C Secure Coding Section 04 - Integers (INT)	7.2	Explicitly undefined
CWE-738	CERT C Secure Coding Section 04 - Integers (INT)	2.23	Pointers
CWE-738	CERT C Secure Coding Section 04 - Integers (INT)	5.2	Conversion to unsigned
CWE-738	CERT C Secure Coding Section 04 - Integers (INT)	5.1	Conversion to signed
CWE-738	CERT C Secure Coding Section 04 - Integers (INT)	5.5	Overflow and wraparound
CWE-738	CERT C Secure Coding Section 04 - Integers (INT)	5.4	Shift operations
CWE-738	CERT C Secure Coding Section 04 - Integers (INT)	3.5	Arithmetic type - Operations

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CWE-738	CERT C Secure Coding Section 04 - Integers (INT)	8.1	Constraint violations
CWE-739	CERT C Secure Coding Section 05 - Floating Point (FLP)	2.2	Arithmetic type - Assignment
CWE-739	CERT C Secure Coding Section 05 - Floating Point (FLP)	3.1	Arithmetic type - Assignment
CWE-739	CERT C Secure Coding Section 05 - Floating Point (FLP)	2.15	Control flow
CWE-740	CERT C Secure Coding Section 06 - Arrays (ARR)	8.1	Constraint violations
CWE-740	CERT C Secure Coding Section 06 - Arrays (ARR)	5.7	Pointers
CWE-740	CERT C Secure Coding Section 06 - Arrays (ARR)	6.6	ISO C99 Language features
CWE-740	CERT C Secure Coding Section 06 - Arrays (ARR)	5.6	Arrays
CWE-741	CERT C Secure Coding Section 07 - Characters and Strings (STR)	8.1	Constraint violations
CWE-741	CERT C Secure Coding Section 07 - Characters and Strings (STR)	2.23	Pointers
CWE-741	CERT C Secure Coding Section 07 - Characters and Strings (STR)	2.2	Arithmetic type - Assignment
CWE-742	CERT C Secure Coding Section 08 - Memory Management (MEM)	3.9	Pointers
CWE-743	CERT C Secure Coding Section 09 - Input Output (FIO)	6.6	ISO C99 Language features
CWE-743	CERT C Secure Coding Section 09 - Input Output (FIO)	6.4	Implementation defined
CWE-743	CERT C Secure Coding Section 09 - Input Output (FIO)	7.2	Explicitly undefined
CWE-746	CERT C Secure Coding Section 12 - Error Handling (ERR)	2.18	Functions
CWE-747	CERT C Secure Coding Section 49 - Miscellaneous (MSC)	1.4	Dataflow - Overflow and wraparound
CWE-747	CERT C Secure Coding Section 49 - Miscellaneous (MSC)	5.12	Control flow
CWE-747	CERT C Secure Coding Section 49 - Miscellaneous (MSC)	6.4	Language extensions
CWE-747	CERT C Secure Coding Section 49 - Miscellaneous (MSC)	8.1	Constraint violations

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CWE-748	CERT C Secure Coding Section 50 - POSIX (POS)	2.18	Functions
CWE-758	Reliance on Undefined Unspecified or Implementation-Defined Behavior	6.3	Implementation defined
CWE-758	Reliance on Undefined Unspecified or Implementation-Defined Behavior	7.2	Explicitly undefined
CWE-758	Reliance on Undefined Unspecified or Implementation-Defined Behavior	7.3	Implicitly undefined
CWE-758	Reliance on Undefined Unspecified or Implementation-Defined Behavior	9.1	QAC configuration
CWE-768	Incorrect Short Circuit Evaluation	2.27	Side Effects
CWE-783	Operator Precedence Logic Error	1.15	Miscellaneous
CWE-783	Operator Precedence Logic Error	2.25	Readability
CWE-783	Operator Precedence Logic Error	0.6	Sub-Messages
CWE-786	Access of Memory Location Before Start of Buffer	5.6	Arrays
CWE-787	Out-of-bounds Write	5.6	Arrays
CWE-788	Access of Memory Location After End of Buffer	5.6	Arrays
CWE-805	Buffer Access with Incorrect Length Value	5.6	Arrays
CWE-823	Use of Out-of-range Pointer Offset	5.6	Arrays
CWE-824	Access of Uninitialized Pointer	5.9	Unset data
CWE-835	Loop with Unreachable Exit Condition	5.13	Control flow
CWE-843	Access of Resource Using Incompatible Type	2.1	Arrays, structures, unions and bit-fields
CWE-843	Access of Resource Using Incompatible Type	5.7	Pointers
CWE-908	Use of Uninitialized Resource	2.17	Enumerations
CWE-908	Use of Uninitialized Resource	8.1	Constraint violations
CWE-908	Use of Uninitialized Resource	5.8	Unset data
CWE-908	Use of Uninitialized Resource	2.16	Declarations and Definitions
CWE-909	Missing Initialization of Resource	2.16	Declarations and Definitions
CWE-909	Missing Initialization of Resource	5.8	Unset data
CWE-909	Missing Initialization of Resource	2.16	Enumerations
CWE-909	Missing Initialization of Resource	8.1	Constraint violations