

QueueLib, 1.0 project documentation

TK Automation

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Chapter 1

Project information

PROJECT	INFORMATION
Company name	TK Automation
Company URL	https://tkucic.github.io
Project name	QueueLib
Project version	1.0
Project URL	https://github.com/tkucic/QueueLib
Content description	Library that holds FIFO and LIFO buffer classes for use in IEC programs
Contact person	Toni Kucic
Content generation date	2023-02-20T20:41:21.2040487

1.1 List of namespaces

- Global
- CODESYS_Control_Win_V3_x64

1.2 Metrics

Namespace	Data types	Program	Function Block	Function	Class
Global	25	0	166	0	0
CODESYS_Control_Win_V3_x64	0	12	0	0	0
Total	25	12	166	0	0

Namespace	Lines of code	Lines of comments	Lines in total	Maintainable size
Global	4485	545	6400	5701
CODESYS_Control_Win_V3_x64	428	101	651	632
Total	4913	646	7051	6333

Chapter 2

Documentation for namespace Global

2.1 Namespace index

- **Data types**

- dtFIFO_P_Element_Int
- dtFIFO_P_Element_Bool
- dtFIFO_P_Element_Byte
- dtFIFO_P_Element_Word
- dtFIFO_P_Element_Dword
- dtFIFO_P_Element_Lword
- dtFIFO_P_Element_Sint
- dtFIFO_P_Element_Usint
- dtFIFO_P_Element_Uint
- dtFIFO_P_Element_Dint
- dtFIFO_P_Element_Udint
- dtFIFO_P_Element_Lint
- dtFIFO_P_Element_Ulint
- dtFIFO_P_Element_Real
- dtFIFO_P_Element_Lreal
- dtFIFO_P_Element_String
- dtFIFO_P_Element_Wstring
- dtFIFO_P_Element_Time
- dtFIFO_P_Element_Ltime
- dtFIFO_P_Element_Date
- dtFIFO_P_Element_Ldate
- dtFIFO_P_Element_Dt
- dtFIFO_P_Element_Ldt
- dtFIFO_P_Element_Tod
- dtFIFO_P_Element_Ltod

- **Function blocks**

- FIFO_S_Int
- FIFO_C_Int

- FIFO_FWFT_Int
- FIFO_UP_Int
- FIFO_OP_Int
- LIFO_Int
- FIFO_S_Sint
- FIFO_S_Usint
- FIFO_S_Uint
- FIFO_S_Bool
- FIFO_S_Byte
- FIFO_S_Word
- FIFO_S_Dword
- FIFO_S_Lword
- FIFO_S_Dint
- FIFO_S_Udint
- FIFO_S_Lint
- FIFO_S_Ulint
- FIFO_S_Real
- FIFO_S_Lreal
- FIFO_S_String
- FIFO_S_Wstring
- FIFO_S_Time
- FIFO_S_Ltime
- FIFO_S_Date
- FIFO_S_Ldate
- FIFO_S_Dt
- FIFO_S_Ldt
- FIFO_S_Tod
- FIFO_S_Ltod
- FIFO_C_Bool
- FIFO_C_Byte
- FIFO_C_Word
- FIFO_C_Dword
- FIFO_C_Lword
- FIFO_C_Sint
- FIFO_C_Usint
- FIFO_C_Uint
- FIFO_C_Dint
- FIFO_C_Udint
- FIFO_C_Lint
- FIFO_C_Ulint
- FIFO_C_Real
- FIFO_C_Lreal
- FIFO_C_String
- FIFO_C_Wstring
- FIFO_C_Time

- FIFO_C_Ltime
- FIFO_C_Date
- FIFO_C_Ldate
- FIFO_C_Dt
- FIFO_C_Ldt
- FIFO_C_Tod
- FIFO_C_Ltod
- FIFO_FWFT_Bool
- FIFO_FWFT_Byte
- FIFO_FWFT_Word
- FIFO_FWFT_Dword
- FIFO_FWFT_Lword
- FIFO_FWFT_Sint
- FIFO_FWFT_Usint
- FIFO_FWFT_Uint
- FIFO_FWFT_Dint
- FIFO_FWFT_Udint
- FIFO_FWFT_Lint
- FIFO_FWFT_Ulint
- FIFO_FWFT_Real
- FIFO_FWFT_Lreal
- FIFO_FWFT_String
- FIFO_FWFT_Wstring
- FIFO_FWFT_Time
- FIFO_FWFT_Ltime
- FIFO_FWFT_Date
- FIFO_FWFT_Ldate
- FIFO_FWFT_Dt
- FIFO_FWFT_Ldt
- FIFO_FWFT_Tod
- FIFO_FWFT_Ltod
- FIFO_UP_Bool
- FIFO_UP_Byte
- FIFO_UP_Word
- FIFO_UP_Dword
- FIFO_UP_Lword
- FIFO_UP_Sint
- FIFO_UP_Usint
- FIFO_UP_Uint
- FIFO_UP_Dint
- FIFO_UP_Udint
- FIFO_UP_Lint
- FIFO_UP_Ulint
- FIFO_UP_Real
- FIFO_UP_Lreal

- FIFO_UP_String
- FIFO_UP_Wstring
- FIFO_UP_Time
- FIFO_UP_Ltime
- FIFO_UP_Date
- FIFO_UP_Ldate
- FIFO_UP_Dt
- FIFO_UP_Ldt
- FIFO_UP_Tod
- FIFO_UP_Ltod
- FIFO_OP_Bool
- FIFO_OP_Byte
- FIFO_OP_Word
- FIFO_OP_Dword
- FIFO_OP_Lword
- FIFO_OP_Sint
- FIFO_OP_Usint
- FIFO_OP_Uint
- FIFO_OP_Dint
- FIFO_OP_Udint
- FIFO_OP_Lint
- FIFO_OP_Ulint
- FIFO_OP_Real
- FIFO_OP_Lreal
- FIFO_OP_String
- FIFO_OP_Wstring
- FIFO_OP_Time
- FIFO_OP_Ltime
- FIFO_OP_Date
- FIFO_OP_Ldate
- FIFO_OP_Dt
- FIFO_OP_Ldt
- FIFO_OP_Tod
- FIFO_OP_Ltod
- LIFO_Bool
- LIFO_Byte
- LIFO_Word
- LIFO_Dword
- LIFO_Lword
- LIFO_Sint
- LIFO_Usint
- LIFO_Uint
- LIFO_Dint
- LIFO_Udint
- LIFO_Lint

- LIFO_Ulint
- LIFO_Real
- LIFO_Lreal
- LIFO_String
- LIFO_Wstring
- LIFO_Time
- LIFO_Ltime
- LIFO_Date
- LIFO_Ldate
- LIFO_Dt
- LIFO_Ldt
- LIFO_Tod
- LIFO_Ltod
- FIFO_C_8b
- FIFO_C_16b
- FIFO_C_32b
- FIFO_C_64b
- FIFO_FWFT_8b
- FIFO_FWFT_16b
- FIFO_FWFT_32b
- FIFO_FWFT_64b
- LIFO_16b
- LIFO_32b
- LIFO_64b
- LIFO_8b
- FIFO_S_8b
- FIFO_S_32b
- FIFO_S_64b
- FIFO_S_16b

2.2 Metrics

Data types	Programs	Function Blocks	Functions	Classes
25	0	166	0	0

Lines of code	Lines of comments	Lines in total	Maintainable size
4485	545	6400	5701

2.3 Data types

2.3.1 dtFIFO_P_Element_Int (struct)

Priority FIFO buffer structure

2.3.1.0.1 Components

Name	Type	Documentation
Value	INT	Value member
Priority	INT	Priority member

2.3.1.0.2 Metrics Number of components: 2

2.3.2 dtFIFO_P_Element_Bool (struct)

Priority FIFO buffer structure

2.3.2.0.1 Components

Name	Type	Documentation
Value	BOOL	Value member
Priority	INT	Priority member

2.3.2.0.2 Metrics Number of components: 2

2.3.3 dtFIFO_P_Element_Byte (struct)

Priority FIFO buffer structure

2.3.3.0.1 Components

Name	Type	Documentation
Value	BYTE	Value member
Priority	INT	Priority member

2.3.3.0.2 Metrics Number of components: 2

2.3.4 dtFIFO_P_Element_Word (struct)

Priority FIFO buffer structure

2.3.4.0.1 Components

Name	Type	Documentation
Value	WORD	Value member
Priority	INT	Priority member

2.3.4.0.2 Metrics Number of components: 2

2.3.5 dtFIFO_P_Element_Dword (struct)

Priority FIFO buffer structure

2.3.5.0.1 Components

Name	Type	Documentation
Value	DWORD	Value member
Priority	INT	Priority member

2.3.5.0.2 Metrics Number of components: 2

2.3.6 dtFIFO_P_Element_Lword (struct)

Priority FIFO buffer structure

2.3.6.0.1 Components

Name	Type	Documentation
Value	LWORD	Value member
Priority	INT	Priority member

2.3.6.0.2 Metrics Number of components: 2

2.3.7 dtFIFO_P_Element_Sint (struct)

Priority FIFO buffer structure

2.3.7.0.1 Components

Name	Type	Documentation
Value	SINT	Value member
Priority	INT	Priority member

2.3.7.0.2 Metrics Number of components: 2

2.3.8 dtFIFO_P_Element_Usint (struct)

Priority FIFO buffer structure

2.3.8.0.1 Components

Name	Type	Documentation
Value	USINT	Value member
Priority	INT	Priority member

2.3.8.0.2 Metrics Number of components: 2

2.3.9 dtFIFO_P_Element_Uint (struct)

Priority FIFO buffer structure

2.3.9.0.1 Components

Name	Type	Documentation
Value	UINT	Value member
Priority	INT	Priority member

2.3.9.0.2 Metrics Number of components: 2

2.3.10 dtFIFO_P_Element_Dint (struct)

Priority FIFO buffer structure

2.3.10.0.1 Components

Name	Type	Documentation
Value	DINT	Value member
Priority	INT	Priority member

2.3.10.0.2 Metrics Number of components: 2

2.3.11 dtFIFO_P_Element_Udint (struct)

Priority FIFO buffer structure

2.3.11.0.1 Components

Name	Type	Documentation
Value	UDINT	Value member
Priority	INT	Priority member

2.3.11.0.2 Metrics Number of components: 2

2.3.12 dtFIFO_P_Element_Lint (struct)

Priority FIFO buffer structure

2.3.12.0.1 Components

Name	Type	Documentation
Value	LINT	Value member
Priority	INT	Priority member

2.3.12.0.2 Metrics Number of components: 2

2.3.13 dtFIFO_P_Element_Ulint (struct)

Priority FIFO buffer structure

2.3.13.0.1 Components

Name	Type	Documentation
Value	ULINT	Value member
Priority	INT	Priority member

2.3.13.0.2 Metrics Number of components: 2

2.3.14 dtFIFO_P_Element_Real (struct)

Priority FIFO buffer structure

2.3.14.0.1 Components

Name	Type	Documentation
Value	REAL	Value member
Priority	INT	Priority member

2.3.14.0.2 Metrics Number of components: 2

2.3.15 dtFIFO_P_Element_Lreal (struct)

Priority FIFO buffer structure

2.3.15.0.1 Components

Name	Type	Documentation
Value	LREAL	Value member
Priority	INT	Priority member

2.3.15.0.2 Metrics Number of components: 2

2.3.16 dtFIFO_P_Element_String (struct)

Priority FIFO buffer structure

2.3.16.0.1 Components

Name	Type	Documentation
Value	STRING[None]	Value member
Priority	INT	Priority member

2.3.16.0.2 Metrics Number of components: 2

2.3.17 dtFIFO_P_Element_Wstring (struct)

Priority FIFO buffer structure

2.3.17.0.1 Components

Name	Type	Documentation
Value	wstring	Value member
Priority	INT	Priority member

2.3.17.0.2 Metrics Number of components: 2

2.3.18 dtFIFO_P_Element_Time (struct)

Priority FIFO buffer structure

2.3.18.0.1 Components

Name	Type	Documentation
Value	TIME	Value member
Priority	INT	Priority member

2.3.18.0.2 Metrics Number of components: 2

2.3.19 dtFIFO_P_Element_Ltime (struct)

Priority FIFO buffer structure

2.3.19.0.1 Components

Name	Type	Documentation
Value	LTIME	Value member
Priority	INT	Priority member

2.3.19.0.2 Metrics Number of components: 2

2.3.20 dtFIFO_P_Element_Date (struct)

Priority FIFO buffer structure

2.3.20.0.1 Components

Name	Type	Documentation
Value	DATE	Value member
Priority	INT	Priority member

2.3.20.0.2 Metrics Number of components: 2

2.3.21 dtFIFO_P_Element_Ldate (struct)

Priority FIFO buffer structure

2.3.21.0.1 Components

Name	Type	Documentation
Value	LDATE	Value member
Priority	INT	Priority member

2.3.21.0.2 Metrics Number of components: 2

2.3.22 dtFIFO_P_Element_Dt (struct)

Priority FIFO buffer structure

2.3.22.0.1 Components

Name	Type	Documentation
Value	DT	Value member
Priority	INT	Priority member

2.3.22.0.2 Metrics Number of components: 2

2.3.23 dtFIFO_P_Element_Ldt (struct)

Priority FIFO buffer structure

2.3.23.0.1 Components

Name	Type	Documentation
Value	LDATE_AND_TIME	Value member
Priority	INT	Priority member

2.3.23.0.2 Metrics Number of components: 2

2.3.24 dtFIFO_P_Element_Tod (struct)

Priority FIFO buffer structure

2.3.24.0.1 Components

Name	Type	Documentation
Value	TOD	Value member
Priority	INT	Priority member

2.3.24.0.2 Metrics Number of components: 2

2.3.25 dtFIFO_P_Element_Ltod (struct)

Priority FIFO buffer structure

2.3.25.0.1 Components

Name	Type	Documentation
Value	LTIME_OF_DAY	Value member
Priority	INT	Priority member

2.3.25.0.2 Metrics Number of components: 2

2.4 Function blocks

2.4.1 FIFO_S_Int

Standard FIFO buffer. Allows Enqueuing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.1.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO INT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.1.0.2 Incode documentation

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2.4.1.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.1.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.1.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.1.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value

2.4.1.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	INT	Value to add to queue

2.4.1.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.1.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value

2.4.2 FIFO_C_Int

Circular FIFO buffer. Allows Enqueuing when there is a free space in front of the tail

2.4.2.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO INT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.2.0.2 Incode documentation

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2.4.2.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.2.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.2.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value

2.4.2.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	INT	Value to add to queue

2.4.2.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.2.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.2.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value

2.4.3 FIFO_FWFT_Int

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.3.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO INT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.3.0.2 Incode documentation Developed entirely with methods

2.4.3.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.3.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.3.1.1 Method Dequeue : **BOOL** Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value

2.4.3.1.2 Method Enqueue : **BOOL** Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	INT	Value to add to queue

2.4.3.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.3.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.3.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value

2.4.4 FIFO_UP_Int

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.4.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_INT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.4.0.2 Incode documentation

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2.4.4.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.4.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.4.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.4.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	INT	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.4.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.4.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.4.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.5 FIFO_OP_Int

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.5.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_INT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.5.0.2 Incode documentation

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2.4.5.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.5.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.5.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.5.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	INT	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.5.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.5.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.5.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.6 LIFO_Int

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.6.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO INT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.6.0.2 Incode documentation Developed entirely with methods

2.4.6.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.6.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.6.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value

2.4.6.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	INT	Value to add to the stack

2.4.6.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.6.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.6.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	INT	Return value

2.4.7 FIFO_S_Sint

Standard FIFO buffer. Allows Enqueing if buffer is not full. After being filled, it has to be emptied completely before further equeueing

2.4.7.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO SINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.7.0.2 Incode documentation Developed entirely with methods

2.4.7.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.7.1 Methods

- Dequeue
- Enqueue
- isFull
- Peek
- isEmpty

2.4.7.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value

2.4.7.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	SINT	Value to add to queue

2.4.7.1.3 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.7.1.4 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value

2.4.7.1.5 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.8 FIFO_S_Usint

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.8.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO USINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.8.0.2 Incode documentation

Developed entirely with methods

2.4.8.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.8.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.8.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.8.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value

2.4.8.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	USINT	Value to add to queue

2.4.8.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.8.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value

2.4.9 FIFO_S_Uint

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.9.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO UINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.9.0.2 Incode documentation

Developed entirely with methods

2.4.9.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.9.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.9.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.9.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value

2.4.9.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UINT	Value to add to queue

2.4.9.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.9.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value

2.4.10 FIFO_S_Bool

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.10.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BOOL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.10.0.2 Incode documentation

Developed entirely with methods

2.4.10.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.10.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.10.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.10.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value

2.4.10.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BOOL	Value to add to queue

2.4.10.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.10.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value

2.4.11 FIFO_S_Byte

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.11.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BYTE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.11.0.2 Incode documentation

Developed entirely with methods

2.4.11.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.11.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.11.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.11.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value

2.4.11.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BYTE	Value to add to queue

2.4.11.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.11.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value

2.4.12 FIFO_S_Word

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.12.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO WORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.12.0.2 Incode documentation

Developed entirely with methods

2.4.12.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.12.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.12.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.12.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value

2.4.12.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	WORD	Value to add to queue

2.4.12.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.12.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value

2.4.13 FIFO_S_Dword

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.13.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.13.0.2 Incode documentation

Developed entirely with methods

2.4.13.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.13.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.13.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.13.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value

2.4.13.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DWORD	Value to add to queue

2.4.13.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.13.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value

2.4.14 FIFO_S_Lword

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.14.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.14.0.2 Incode documentation

Developed entirely with methods

2.4.14.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.14.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.14.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.14.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value

2.4.14.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LWORD	Value to add to queue

2.4.14.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.14.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value

2.4.15 FIFO_S_Dint

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.15.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.15.0.2 Incode documentation

Developed entirely with methods

2.4.15.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.15.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.15.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.15.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value

2.4.15.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DINT	Value to add to queue

2.4.15.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.15.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value

2.4.16 FIFO_S_Udint

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.16.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO UDINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.16.0.2 Incode documentation

Developed entirely with methods

2.4.16.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.16.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.16.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.16.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value

2.4.16.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UDINT	Value to add to queue

2.4.16.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.16.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value

2.4.17 FIFO_S_Lint

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.17.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.17.0.2 Incode documentation

Developed entirely with methods

2.4.17.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.17.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.17.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.17.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value

2.4.17.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LINT	Value to add to queue

2.4.17.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.17.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value

2.4.18 FIFO_S_Ulint

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.18.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO ULINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.18.0.2 Incode documentation

Developed entirely with methods

2.4.18.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.18.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.18.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.18.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value

2.4.18.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	ULINT	Value to add to queue

2.4.18.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.18.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value

2.4.19 FIFO_S_Real

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.19.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO REAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.19.0.2 Incode documentation

Developed entirely with methods

2.4.19.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.19.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.19.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.19.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value

2.4.19.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	REAL	Value to add to queue

2.4.19.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.19.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value

2.4.20 FIFO_S_Lreal

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.20.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LREAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.20.0.2 Incode documentation

Developed entirely with methods

2.4.20.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.20.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.20.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.20.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value

2.4.20.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LREAL	Value to add to queue

2.4.20.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.20.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value

2.4.21 FIFO_S_String

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.21.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO STRING[None]	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.21.0.2 Incode documentation

Developed entirely with methods

2.4.21.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.21.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.21.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.21.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value

2.4.21.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	STRING[None]	Value to add to queue

2.4.21.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.21.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value

2.4.22 FIFO_S_Wstring

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.22.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO wstring	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.22.0.2 Incode documentation Developed entirely with methods

2.4.22.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.22.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.22.1.1 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.22.1.2 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value

2.4.22.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	wstring	Value to add to queue

2.4.22.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.22.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value

2.4.23 FIFO_S_Time

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.23.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO TIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.23.0.2 Incode documentation

Developed entirely with methods

2.4.23.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.23.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.23.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.23.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value

2.4.23.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TIME	Value to add to queue

2.4.23.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.23.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value

2.4.24 FIFO_S_Ltime

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.24.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LTIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.24.0.2 Incode documentation

Developed entirely with methods

2.4.24.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.24.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.24.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.24.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value

2.4.24.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME	Value to add to queue

2.4.24.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.24.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value

2.4.25 FIFO_S_Date

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.25.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.25.0.2 Incode documentation

Developed entirely with methods

2.4.25.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.25.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.25.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.25.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value

2.4.25.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DATE	Value to add to queue

2.4.25.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.25.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value

2.4.26 FIFO_S_Ldate

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.26.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LDATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.26.0.2 Incode documentation

Developed entirely with methods

2.4.26.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.26.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.26.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.26.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value

2.4.26.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE	Value to add to queue

2.4.26.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.26.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value

2.4.27 FIFO_S_Dt

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.27.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.27.0.2 Incode documentation

Developed entirely with methods

2.4.27.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.27.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.27.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.27.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value

2.4.27.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DT	Value to add to queue

2.4.27.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.27.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value

2.4.28 FIFO_S_Ldt

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.28.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LDATE_AND_TIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.28.0.2 Incode documentation

Developed entirely with methods

2.4.28.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.28.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.28.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.28.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATA_AND_TIME	Return value

2.4.28.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE_AND_TIME	Value to add to queue

2.4.28.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.28.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value

2.4.29 FIFO_S_Tod

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.29.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO TOD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.29.0.2 Incode documentation

Developed entirely with methods

2.4.29.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.29.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.29.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.29.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value

2.4.29.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TOD	Value to add to queue

2.4.29.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.29.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value

2.4.30 FIFO_S_Ltod

Standard FIFO buffer. Allows Enqueueing if buffer is not full. After being filled, it has to be emptied completely before further enqueueing

2.4.30.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LTIME_OF_DAY	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.30.0.2 Incode documentation

Developed entirely with methods

2.4.30.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.30.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.30.1.1 Method isEmpty : BOOL

Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.30.1.2 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value

2.4.30.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME_OF_DAY	Value to add to queue

2.4.30.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation

2.4.30.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value

2.4.31 FIFO_C_Bool

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.31.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BOOL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.31.0.2 Incode documentation

Developed entirely with methods

2.4.31.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.31.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.31.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value

2.4.31.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BOOL	Value to add to queue

2.4.31.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.31.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.31.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value

2.4.32 FIFO_C_Byte

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.32.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BYTE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.32.0.2 Incode documentation

Developed entirely with methods

2.4.32.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.32.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.32.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value

2.4.32.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BYTE	Value to add to queue

2.4.32.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.32.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.32.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value

2.4.33 FIFO_C_Word

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.33.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO WORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.33.0.2 Incode documentation

Developed entirely with methods

2.4.33.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.33.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.33.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value

2.4.33.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	WORD	Value to add to queue

2.4.33.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.33.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.33.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value

2.4.34 FIFO_C_Dword

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.34.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.34.0.2 Incode documentation

Developed entirely with methods

2.4.34.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.34.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.34.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value

2.4.34.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DWORD	Value to add to queue

2.4.34.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.34.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.34.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value

2.4.35 FIFO_C_Lword

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.35.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.35.0.2 Incode documentation

Developed entirely with methods

2.4.35.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.35.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.35.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value

2.4.35.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LWORD	Value to add to queue

2.4.35.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.35.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.35.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value

2.4.36 FIFO_C_Sint

Circular FIFO buffer. Allows Enqueuing when there is a free space in front of the tail

2.4.36.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO SINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.36.0.2 Incode documentation

Developed entirely with methods

2.4.36.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.36.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.36.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value

2.4.36.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	SINT	Value to add to queue

2.4.36.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.36.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.36.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value

2.4.37 FIFO_C_Usint

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.37.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO USINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.37.0.2 Incode documentation

Developed entirely with methods

2.4.37.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.37.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.37.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value

2.4.37.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	USINT	Value to add to queue

2.4.37.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.37.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.37.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value

2.4.38 FIFO_C_Uint

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.38.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO UINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.38.0.2 Incode documentation

Developed entirely with methods

2.4.38.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.38.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.38.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value

2.4.38.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UINT	Value to add to queue

2.4.38.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.38.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.38.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value

2.4.39 FIFO_C_Dint

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.39.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.39.0.2 Incode documentation

Developed entirely with methods

2.4.39.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.39.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.39.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value

2.4.39.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DINT	Value to add to queue

2.4.39.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.39.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.39.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value

2.4.40 FIFO_C_Udint

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.40.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO UDINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.40.0.2 Incode documentation

Developed entirely with methods

2.4.40.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.40.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.40.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value

2.4.40.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UDINT	Value to add to queue

2.4.40.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.40.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.40.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value

2.4.41 FIFO_C_Lint

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.41.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.41.0.2 Incode documentation

Developed entirely with methods

2.4.41.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.41.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.41.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value

2.4.41.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LINT	Value to add to queue

2.4.41.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.41.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.41.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value

2.4.42 FIFO_C_Ulint

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.42.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO ULINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.42.0.2 Incode documentation

Developed entirely with methods

2.4.42.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.42.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.42.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value

2.4.42.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	ULINT	Value to add to queue

2.4.42.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.42.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.42.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value

2.4.43 FIFO_C_Real

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.43.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO REAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.43.0.2 Incode documentation

Developed entirely with methods

2.4.43.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.43.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.43.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value

2.4.43.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	REAL	Value to add to queue

2.4.43.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.43.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.43.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value

2.4.44 FIFO_C_Lreal

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.44.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LREAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.44.0.2 Incode documentation

 Developed entirely with methods

2.4.44.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.44.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.44.1.1 Method Dequeue : BOOL

 Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value

2.4.44.1.2 Method Enqueue : BOOL

 Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LREAL	Value to add to queue

2.4.44.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.44.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.44.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value

2.4.45 FIFO_C_String

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.45.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO STRING[None]	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.45.0.2 Incode documentation

Developed entirely with methods

2.4.45.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.45.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.45.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value

2.4.45.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	STRING[None]	Value to add to queue

2.4.45.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.45.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.45.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value

2.4.46 FIFO_C_Wstring

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.46.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO wstring	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.46.0.2 Incode documentation

 Developed entirely with methods

2.4.46.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.46.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.46.1.1 Method Dequeue : BOOL

 Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value

2.4.46.1.2 Method Enqueue : BOOL

 Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	wstring	Value to add to queue

2.4.46.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.46.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.46.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value

2.4.47 FIFO_C_Time

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.47.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO TIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.47.0.2 Incode documentation

 Developed entirely with methods

2.4.47.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.47.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.47.1.1 Method Dequeue : BOOL

 Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value

2.4.47.1.2 Method Enqueue : BOOL

 Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TIME	Value to add to queue

2.4.47.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.47.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.47.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value

2.4.48 FIFO_C_Ltime

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.48.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LTIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.48.0.2 Incode documentation

 Developed entirely with methods

2.4.48.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.48.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.48.1.1 Method Dequeue : BOOL

 Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value

2.4.48.1.2 Method Enqueue : BOOL

 Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME	Value to add to queue

2.4.48.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.48.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.48.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value

2.4.49 FIFO_C_Date

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.49.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.49.0.2 Incode documentation

Developed entirely with methods

2.4.49.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.49.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.49.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value

2.4.49.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DATE	Value to add to queue

2.4.49.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.49.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.49.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value

2.4.50 FIFO_C_Ldate

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.50.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LDATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.50.0.2 Incode documentation

Developed entirely with methods

2.4.50.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.50.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.50.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value

2.4.50.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE	Value to add to queue

2.4.50.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.50.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.50.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value

2.4.51 FIFO_C_Dt

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.51.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.51.0.2 Incode documentation

Developed entirely with methods

2.4.51.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.51.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.51.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value

2.4.51.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DT	Value to add to queue

2.4.51.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.51.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.51.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value

2.4.52 FIFO_C_Ldt

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.52.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LDATE_AND_TIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.52.0.2 Incode documentation

Developed entirely with methods

2.4.52.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.52.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.52.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value

2.4.52.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE_AND_TIME	Value to add to queue

2.4.52.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.52.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.52.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value

2.4.53 FIFO_C_Tod

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.53.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO TOD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.53.0.2 Incode documentation

Developed entirely with methods

2.4.53.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.53.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.53.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value

2.4.53.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TOD	Value to add to queue

2.4.53.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.53.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.53.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value

2.4.54 FIFO_C_Ltod

Circular FIFO buffer. Allows Enqueueing when there is a free space in front of the tail

2.4.54.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LTIME_OF_DAY	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.54.0.2 Incode documentation

Developed entirely with methods

2.4.54.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.54.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.54.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value

2.4.54.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME_OF_DAY	Value to add to queue

2.4.54.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.54.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.54.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value

2.4.55 FIFO_FWFT_Bool

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.55.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BOOL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.55.0.2 Incode documentation Developed entirely with methods

2.4.55.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.55.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.55.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value

2.4.55.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BOOL	Value to add to queue

2.4.55.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.55.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.55.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value

2.4.56 FIFO_FWFT_Byte

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.56.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BYTE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.56.0.2 Incode documentation Developed entirely with methods

2.4.56.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.56.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.56.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value

2.4.56.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BYTE	Value to add to queue

2.4.56.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.56.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.56.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value

2.4.57 FIFO_FWFT_Word

First word fall through FIFO buffer. After Dequeueing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.57.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO WORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.57.0.2 Incode documentation Developed entirely with methods

2.4.57.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.57.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.57.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value

2.4.57.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	WORD	Value to add to queue

2.4.57.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.57.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.57.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value

2.4.58 FIFO_FWFT_Dword

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.58.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.58.0.2 Incode documentation Developed entirely with methods

2.4.58.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.58.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.58.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value

2.4.58.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DWORD	Value to add to queue

2.4.58.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.58.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.58.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value

2.4.59 FIFO_FWFT_Lword

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.59.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.59.0.2 Incode documentation Developed entirely with methods

2.4.59.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.59.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.59.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value

2.4.59.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LWORD	Value to add to queue

2.4.59.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.59.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.59.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value

2.4.60 FIFO_FWFT_Sint

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.60.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO SINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.60.0.2 Incode documentation Developed entirely with methods

2.4.60.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.60.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.60.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value

2.4.60.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	SINT	Value to add to queue

2.4.60.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.60.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.60.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value

2.4.61 FIFO_FWFT_Usint

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.61.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO USINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.61.0.2 Incode documentation Developed entirely with methods

2.4.61.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.61.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.61.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value

2.4.61.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	USINT	Value to add to queue

2.4.61.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.61.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.61.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value

2.4.62 FIFO_FWFT_Uint

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.62.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO UINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.62.0.2 Incode documentation Developed entirely with methods

2.4.62.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.62.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.62.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value

2.4.62.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UINT	Value to add to queue

2.4.62.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.62.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.62.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value

2.4.63 FIFO_FWFT_Dint

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.63.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.63.0.2 Incode documentation Developed entirely with methods

2.4.63.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.63.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.63.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value

2.4.63.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DINT	Value to add to queue

2.4.63.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.63.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.63.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value

2.4.64 FIFO_FWFT_Udint

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.64.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO UDINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.64.0.2 Incode documentation Developed entirely with methods

2.4.64.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.64.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.64.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value

2.4.64.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UDINT	Value to add to queue

2.4.64.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.64.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.64.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value

2.4.65 FIFO_FWFT_Lint

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.65.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.65.0.2 Incode documentation Developed entirely with methods

2.4.65.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.65.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.65.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value

2.4.65.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LINT	Value to add to queue

2.4.65.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.65.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.65.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value

2.4.66 FIFO_FWFT_Ulint

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.66.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO ULINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.66.0.2 Incode documentation Developed entirely with methods

2.4.66.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.66.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.66.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value

2.4.66.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	ULINT	Value to add to queue

2.4.66.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.66.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.66.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value

2.4.67 FIFO_FWFT_Real

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.67.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO REAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.67.0.2 Incode documentation Developed entirely with methods

2.4.67.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.67.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.67.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value

2.4.67.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	REAL	Value to add to queue

2.4.67.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.67.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.67.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value

2.4.68 FIFO_FWFT_Lreal

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.68.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LREAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.68.0.2 Incode documentation Developed entirely with methods

2.4.68.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.68.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.68.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value

2.4.68.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LREAL	Value to add to queue

2.4.68.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.68.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.68.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value

2.4.69 FIFO_FWFT_String

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.69.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO STRING[None]	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.69.0.2 Incode documentation Developed entirely with methods

2.4.69.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.69.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.69.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value

2.4.69.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	STRING[None]	Value to add to queue

2.4.69.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.69.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.69.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value

2.4.70 FIFO_FWFT_Wstring

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.70.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO wstring	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.70.0.2 Incode documentation Developed entirely with methods

2.4.70.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.70.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.70.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value

2.4.70.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	wstring	Value to add to queue

2.4.70.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.70.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.70.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value

2.4.71 FIFO_FWFT_Time

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.71.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO TIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.71.0.2 Incode documentation Developed entirely with methods

2.4.71.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.71.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.71.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value

2.4.71.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TIME	Value to add to queue

2.4.71.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.71.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.71.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value

2.4.72 FIFO_FWFT_Ltime

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.72.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LTIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.72.0.2 Incode documentation Developed entirely with methods

2.4.72.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.72.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.72.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value

2.4.72.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME	Value to add to queue

2.4.72.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.72.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.72.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value

2.4.73 FIFO_FWFT_Date

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.73.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.73.0.2 Incode documentation Developed entirely with methods

2.4.73.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.73.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.73.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value

2.4.73.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DATE	Value to add to queue

2.4.73.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.73.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.73.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value

2.4.74 FIFO_FWFT_Ldate

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.74.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LDATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.74.0.2 Incode documentation Developed entirely with methods

2.4.74.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.74.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.74.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value

2.4.74.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE	Value to add to queue

2.4.74.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.74.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.74.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value

2.4.75 FIFO_FWFT_Dt

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.75.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.75.0.2 Incode documentation Developed entirely with methods

2.4.75.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.75.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.75.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value

2.4.75.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DT	Value to add to queue

2.4.75.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.75.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.75.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value

2.4.76 FIFO_FWFT_Ldt

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.76.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LDATE_AND_TIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.76.0.2 Incode documentation Developed entirely with methods

2.4.76.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.76.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.76.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value

2.4.76.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE_AND_TIME	Value to add to queue

2.4.76.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.76.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.76.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value

2.4.77 FIFO_FWFT_Tod

First word fall through FIFO buffer. After Dequeueing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.77.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO TOD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.77.0.2 Incode documentation Developed entirely with methods

2.4.77.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.77.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.77.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value

2.4.77.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TOD	Value to add to queue

2.4.77.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.77.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.77.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value

2.4.78 FIFO_FWFT_Ltod

First word fall through FIFO buffer. After Dequeuing the whole array is shifted one space to the left so the next element is always at the beginning

2.4.78.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LTIME_OF_DAY	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.78.0.2 Incode documentation Developed entirely with methods

2.4.78.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.78.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.78.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value

2.4.78.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME_OF_DAY	Value to add to queue

2.4.78.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.78.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.78.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value

2.4.79 FIFO_UP_Bool

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.79.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_BOOL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.79.0.2 Incode documentation

Developed entirely with methods

2.4.79.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.79.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.79.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.79.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BOOL	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.79.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.79.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.79.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.80 FIFO_UP_Byte

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.80.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_BYTE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.80.0.2 Incode documentation

Developed entirely with methods

2.4.80.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.80.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.80.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.80.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BYTE	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.80.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.80.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.80.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.81 FIFO_UP_Word

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.81.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_WORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.81.0.2 Incode documentation

Developed entirely with methods

2.4.81.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.81.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.81.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.81.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	WORD	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.81.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.81.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.81.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.82 FIFO_UP_Dword

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.82.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_DWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.82.0.2 Incode documentation

Developed entirely with methods

2.4.82.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.82.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.82.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.82.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DWORD	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.82.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.82.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.82.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.83 FIFO_UP_Lword

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.83.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.83.0.2 Incode documentation

Developed entirely with methods

2.4.83.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.83.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.83.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.83.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LWORD	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.83.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.83.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.83.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.84 FIFO_UP_Sint

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.84.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_SINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.84.0.2 Incode documentation

Developed entirely with methods

2.4.84.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.84.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.84.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.84.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	SINT	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.84.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.84.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.84.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.85 FIFO_UP_Usint

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.85.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_USINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.85.0.2 Incode documentation

Developed entirely with methods

2.4.85.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.85.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.85.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.85.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	USINT	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.85.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.85.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.85.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.86 FIFO_UP_Uint

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.86.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_UINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.86.0.2 Incode documentation

Developed entirely with methods

2.4.86.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.86.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.86.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.86.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UINT	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.86.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.86.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.86.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.87 FIFO_UP_Dint

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.87.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_DINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.87.0.2 Incode documentation

Developed entirely with methods

2.4.87.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.87.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.87.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.87.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DINT	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.87.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.87.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.87.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.88 FIFO_UP_Udint

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.88.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_UDINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.88.0.2 Incode documentation

Developed entirely with methods

2.4.88.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.88.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.88.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.88.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UDINT	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.88.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.88.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.88.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.89 FIFO_UP_Lint

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.89.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.89.0.2 Incode documentation Developed entirely with methods

2.4.89.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.89.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.89.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.89.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LINT	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.89.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.89.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.89.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.90 FIFO_UP_Ulint

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.90.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_ULINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.90.0.2 Incode documentation

Developed entirely with methods

2.4.90.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.90.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.90.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.90.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	ULINT	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.90.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.90.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.90.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.91 FIFO_UP_Real

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.91.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_REAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.91.0.2 Incode documentation

Developed entirely with methods

2.4.91.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.91.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.91.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.91.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	REAL	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.91.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.91.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.91.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.92 FIFO_UP_Lreal

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.92.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LREAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.92.0.2 Incode documentation

Developed entirely with methods

2.4.92.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.92.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.92.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.92.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LREAL	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.92.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.92.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.92.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.93 FIFO_UP_String

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.93.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_STRING	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.93.0.2 Incode documentation

Developed entirely with methods

2.4.93.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.93.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.93.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.93.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	STRING[None]	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.93.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.93.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.93.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.94 FIFO_UP_Wstring

Unordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first.

2.4.94.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_WSTRING	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.94.0.2 Incode documentation

Developed entirely with methods

2.4.94.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.94.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.94.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.94.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	wstring	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.94.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.94.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.94.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.95 FIFO_UP_Time

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.95.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_TIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.95.0.2 Incode documentation

Developed entirely with methods

2.4.95.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.95.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.95.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.95.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TIME	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.95.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.95.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.95.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.96 FIFO_UP_Ltime

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.96.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LTIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.96.0.2 Incode documentation

Developed entirely with methods

2.4.96.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.96.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.96.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.96.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.96.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.96.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.96.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.97 FIFO_UP_Date

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.97.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_DATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.97.0.2 Incode documentation Developed entirely with methods

2.4.97.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.97.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.97.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.97.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DATE	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.97.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.97.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.97.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.98 FIFO_UP_Ldate

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.98.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LDATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.98.0.2 Incode documentation

Developed entirely with methods

2.4.98.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.98.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.98.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.98.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.98.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.98.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.98.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.99 FIFO_UP_Dt

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.99.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_DT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.99.0.2 Incode documentation

Developed entirely with methods

2.4.99.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.99.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.99.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.99.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DT	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.99.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.99.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.99.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.100 FIFO_UP_Ldt

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.100.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LDT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.100.0.2 Incode documentation

Developed entirely with methods

2.4.100.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.100.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.100.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.100.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE_AND_TIME	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.100.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.100.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.100.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.101 FIFO_UP_Tod

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.101.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_TOD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.101.0.2 Incode documentation Developed entirely with methods

2.4.101.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.101.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.101.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.101.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TOD	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.101.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.101.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.101.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.102 FIFO_UP_Ltod

Unordered Priority FIFO buffer. Allows Enqueuing if buffer is not full. Dequeues the highest priority elements first.

2.4.102.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LTOD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.102.0.2 Incode documentation Developed entirely with methods

2.4.102.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	38	10	58	45

2.4.102.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.102.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.102.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME_OF_DAY	Value to add to queue
VAR_INPUT	Priority	INT	Return priority

2.4.102.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.102.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.102.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.103 FIFO_OP_Bool

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.103.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_BOOL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.103.0.2 Incode documentation

Developed entirely with methods

2.4.103.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.103.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.103.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.103.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BOOL	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.103.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.103.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.103.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.104 FIFO_OP_Byte

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.104.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_BYTE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.104.0.2 Incode documentation

Developed entirely with methods

2.4.104.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.104.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.104.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.104.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BYTE	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.104.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.104.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.104.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.105 FIFO_OP_Word

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.105.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_WORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.105.0.2 Incode documentation Developed entirely with methods

2.4.105.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.105.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.105.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.105.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	WORD	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.105.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.105.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.105.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.106 FIFO_OP_Dword

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.106.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_DWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.106.0.2 Incode documentation Developed entirely with methods

2.4.106.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.106.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.106.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.106.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DWORD	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.106.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.106.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.106.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.107 FIFO_OP_Lword

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.107.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.107.0.2 Incode documentation

Developed entirely with methods

2.4.107.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.107.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.107.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.107.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LWORD	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.107.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.107.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.107.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.108 FIFO_OP_Sint

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.108.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_SINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.108.0.2 Incode documentation

Developed entirely with methods

2.4.108.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.108.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.108.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.108.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	SINT	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.108.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.108.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.108.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.109 FIFO_OP_Usint

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.109.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_USINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.109.0.2 Incode documentation

Developed entirely with methods

2.4.109.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.109.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.109.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.109.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	USINT	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.109.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.109.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.109.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.110 FIFO_OP_Uint

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.110.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_UINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.110.0.2 Incode documentation

Developed entirely with methods

2.4.110.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.110.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.110.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.110.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UINT	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.110.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.110.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.110.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.111 FIFO_OP_Dint

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.111.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_DINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.111.0.2 Incode documentation

Developed entirely with methods

2.4.111.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.111.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.111.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.111.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DINT	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.111.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.111.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.111.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.112 FIFO_OP_Udint

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.112.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_UDINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.112.0.2 Incode documentation

Developed entirely with methods

2.4.112.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.112.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.112.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.112.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UDINT	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.112.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.112.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.112.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.113 FIFO_OP_Lint

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.113.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.113.0.2 Incode documentation

Developed entirely with methods

2.4.113.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.113.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.113.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.113.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LINT	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.113.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.113.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.113.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.114 FIFO_OP_Ulint

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.114.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_ULINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.114.0.2 Incode documentation

Developed entirely with methods

2.4.114.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.114.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.114.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.114.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	ULINT	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.114.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.114.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.114.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.115 FIFO_OP_Real

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.115.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_REAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.115.0.2 Incode documentation

Developed entirely with methods

2.4.115.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.115.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.115.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.115.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	REAL	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.115.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.115.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.115.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.116 FIFO_OP_Lreal

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.116.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LREAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.116.0.2 Incode documentation

Developed entirely with methods

2.4.116.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.116.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.116.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.116.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LREAL	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.116.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.116.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.116.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.117 FIFO_OP_String

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.117.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_STRING	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.117.0.2 Incode documentation

Developed entirely with methods

2.4.117.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.117.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.117.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.117.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	STRING[None]	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.117.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.117.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.117.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.118 FIFO_OP_Wstring

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.118.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_WSTRING	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.118.0.2 Incode documentation

Developed entirely with methods

2.4.118.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.118.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.118.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.118.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	wstring	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.118.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.118.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.118.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.119 FIFO_OP_Time

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.119.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_TIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.119.0.2 Incode documentation

Developed entirely with methods

2.4.119.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.119.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.119.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.119.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TIME	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.119.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.119.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.119.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.120 FIFO_OP_Ltime

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.120.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LTIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.120.0.2 Incode documentation

Developed entirely with methods

2.4.120.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.120.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.120.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.120.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.120.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.120.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.120.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.121 FIFO_OP_Date

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.121.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_DATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.121.0.2 Incode documentation

Developed entirely with methods

2.4.121.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.121.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.121.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.121.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DATE	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.121.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.121.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.121.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.122 FIFO_OP_Ldate

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.122.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LDATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.122.0.2 Incode documentation Developed entirely with methods

2.4.122.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.122.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.122.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.122.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.122.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.122.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.122.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.123 FIFO_OP_Dt

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.123.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_DT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.123.0.2 Incode documentation

Developed entirely with methods

2.4.123.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.123.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.123.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.123.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DT	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.123.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.123.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.123.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.124 FIFO_OP_Ldt

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.124.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LDT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.124.0.2 Incode documentation

Developed entirely with methods

2.4.124.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.124.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.124.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.124.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE_AND_TIME	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.124.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.124.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.124.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.125 FIFO_OP_Tod

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.125.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_TOD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.125.0.2 Incode documentation Developed entirely with methods

2.4.125.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.125.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.125.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.125.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TOD	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.125.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.125.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.125.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.126 FIFO_OP_Ltod

Ordered Priority FIFO buffer. Allows Enqueing if buffer is not full. Dequeues the highest priority elements first. Buffer is ordered from lowest to highest priority. e.g. 0 = Lowest priority

2.4.126.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO dt-FIFO_P_Element_LTOD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.126.0.2 Incode documentation Developed entirely with methods

2.4.126.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	37	6	53	43

2.4.126.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.126.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.126.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME_OF_DAY	Value to add to queue
VAR_INPUT	Priority	INT	Priority to add to queue

2.4.126.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.126.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.126.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value
VAR_OUTPUT	Priority	INT	Return priority

2.4.127 LIFO_Bool

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.127.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BOOL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.127.0.2 Incode documentation Developed entirely with methods

2.4.127.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.127.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.127.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value

2.4.127.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BOOL	Value to add to the stack

2.4.127.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.127.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.127.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BOOL	Return value

2.4.128 LIFO_Byte

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.128.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BYTE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.128.0.2 Incode documentation Developed entirely with methods

2.4.128.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.128.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.128.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value

2.4.128.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BYTE	Value to add to the stack

2.4.128.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.128.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.128.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value

2.4.129 LIFO_Word

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.129.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO WORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.129.0.2 Incode documentation Developed entirely with methods

2.4.129.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.129.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.129.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value

2.4.129.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	WORD	Value to add to the stack

2.4.129.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.129.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.129.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value

2.4.130 LIFO_Dword

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.130.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.130.0.2 Incode documentation Developed entirely with methods

2.4.130.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.130.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.130.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value

2.4.130.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DWORD	Value to add to the stack

2.4.130.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.130.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.130.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value

2.4.131 LIFO_Lword

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.131.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.131.0.2 Incode documentation Developed entirely with methods

2.4.131.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.131.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.131.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value

2.4.131.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LWORD	Value to add to the stack

2.4.131.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.131.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.131.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value

2.4.132 LIFO_Sint

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.132.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO SINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.132.0.2 Incode documentation Developed entirely with methods

2.4.132.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.132.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.132.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value

2.4.132.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	SINT	Value to add to the stack

2.4.132.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.132.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.132.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	SINT	Return value

2.4.133 LIFO_Usint

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.133.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO USINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.133.0.2 Incode documentation Developed entirely with methods

2.4.133.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.133.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.133.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value

2.4.133.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	USINT	Value to add to the stack

2.4.133.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.133.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.133.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	USINT	Return value

2.4.134 LIFO_Uint

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.134.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO UINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.134.0.2 Incode documentation Developed entirely with methods

2.4.134.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.134.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.134.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value

2.4.134.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UINT	Value to add to the stack

2.4.134.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.134.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.134.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UINT	Return value

2.4.135 LIFO_Dint

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.135.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.135.0.2 Incode documentation Developed entirely with methods

2.4.135.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.135.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.135.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value

2.4.135.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DINT	Value to add to the stack

2.4.135.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.135.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.135.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DINT	Return value

2.4.136 LIFO_Udint

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.136.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO UDINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.136.0.2 Incode documentation Developed entirely with methods

2.4.136.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.136.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.136.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value

2.4.136.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	UDINT	Value to add to the stack

2.4.136.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.136.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.136.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	UDINT	Return value

2.4.137 LIFO_Lint

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.137.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.137.0.2 Incode documentation Developed entirely with methods

2.4.137.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.137.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.137.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value

2.4.137.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LINT	Value to add to the stack

2.4.137.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.137.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.137.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LINT	Return value

2.4.138 LIFO_Ulint

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.138.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO ULINT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.138.0.2 Incode documentation Developed entirely with methods

2.4.138.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.138.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.138.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value

2.4.138.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	ULINT	Value to add to the stack

2.4.138.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.138.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.138.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	ULINT	Return value

2.4.139 LIFO_Real

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.139.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO REAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.139.0.2 Incode documentation Developed entirely with methods

2.4.139.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.139.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.139.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value

2.4.139.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	REAL	Value to add to the stack

2.4.139.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.139.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.139.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	REAL	Return value

2.4.140 LIFO_Lreal

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.140.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LREAL	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.140.0.2 Incode documentation Developed entirely with methods

2.4.140.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.140.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.140.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value

2.4.140.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LREAL	Value to add to the stack

2.4.140.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.140.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.140.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LREAL	Return value

2.4.141 LIFO_String

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.141.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO STRING[None]	Externally allocated buffer. Must be in format AR- RAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.141.0.2 Incode documentation Developed entirely with methods

2.4.141.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of com- ments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.141.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.141.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value

2.4.141.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	STRING[None]	Value to add to the stack

2.4.141.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.141.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.141.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	STRING[None]	Return value

2.4.142 LIFO_Wstring

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.142.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO wstring	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.142.0.2 Incode documentation Developed entirely with methods

2.4.142.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.142.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.142.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value

2.4.142.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	wstring	Value to add to the stack

2.4.142.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.142.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.142.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	wstring	Return value

2.4.143 LIFO_Time

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.143.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO TIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.143.0.2 Incode documentation Developed entirely with methods

2.4.143.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.143.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.143.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value

2.4.143.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TIME	Value to add to the stack

2.4.143.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.143.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.143.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TIME	Return value

2.4.144 LIFO_Ltime

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.144.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LTIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.144.0.2 Incode documentation Developed entirely with methods

2.4.144.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.144.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.144.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value

2.4.144.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME	Value to add to the stack

2.4.144.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.144.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.144.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME	Return value

2.4.145 LIFO_Date

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.145.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.145.0.2 Incode documentation Developed entirely with methods

2.4.145.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.145.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.145.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value

2.4.145.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DATE	Value to add to the stack

2.4.145.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.145.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.145.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DATE	Return value

2.4.146 LIFO_Ldate

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.146.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LDATE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.146.0.2 Incode documentation Developed entirely with methods

2.4.146.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.146.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.146.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value

2.4.146.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE	Value to add to the stack

2.4.146.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.146.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.146.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE	Return value

2.4.147 LIFO_Dt

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.147.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DT	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.147.0.2 Incode documentation Developed entirely with methods

2.4.147.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.147.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.147.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value

2.4.147.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DT	Value to add to the stack

2.4.147.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.147.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.147.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DT	Return value

2.4.148 LIFO_Ldt

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.148.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LDATE_AND_TIME	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.148.0.2 Incode documentation Developed entirely with methods

2.4.148.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.148.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.148.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value

2.4.148.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LDATE_AND_TIME	Value to add to the stack

2.4.148.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
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2.4.148.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.148.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LDATE_AND_TIME	Return value

2.4.149 LIFO_Tod

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.149.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO TOD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.149.0.2 Incode documentation Developed entirely with methods

2.4.149.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.149.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.149.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value

2.4.149.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	TOD	Value to add to the stack

2.4.149.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.149.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.149.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	TOD	Return value

2.4.150 LIFO_Ltod

LIFO / Stack buffer. Pushing places new value on top of the stack and popping removes the element from the top.

2.4.150.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LTIME_OF_DAY	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.150.0.2 Incode documentation Developed entirely with methods

2.4.150.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.150.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.150.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value

2.4.150.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LTIME_OF_DAY	Value to add to the stack

2.4.150.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.150.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.150.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LTIME_OF_DAY	Return value

2.4.151 FIFO_C_8b

Circular FIFO buffer of generic type that works with 8 bit values (based on BYTE). Allows Enqueuing when there is a free space in front of the tail. Strings and data structures are not supported.

2.4.151.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BYTE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.151.0.2 Incode documentation Developed entirely with methods

2.4.151.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.151.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.151.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value that has to be casted to correct destination type

2.4.151.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	BYTE	Value to add to queue

2.4.151.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.151.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.151.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	BYTE	Return value that has to be casted to correct destination type

2.4.152 FIFO_C_16b

Circular FIFO buffer of generic type that works with 16 bit values (based on WORD). Allows Enqueuing when there is a free space in front of the tail. Strings and data structures are not supported.

2.4.152.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO WORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.152.0.2 Incode documentation Developed entirely with methods

2.4.152.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.152.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.152.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value that has to be casted to correct destination type

2.4.152.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	WORD	Value to add to queue

2.4.152.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.152.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.152.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	WORD	Return value that has to be casted to correct destination type

2.4.153 FIFO_C_32b

Circular FIFO buffer of generic type that works with 32 bit values (based on DWORD). Allows Enqueuing when there is a free space in front of the tail. Strings and data structures are not supported.

2.4.153.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.153.0.2 Incode documentation Developed entirely with methods

2.4.153.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.153.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.153.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value that has to be casted to correct destination type

2.4.153.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	WORD	Value to add to queue

2.4.153.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.153.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.153.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	DWORD	Return value that has to be casted to correct destination type

2.4.154 FIFO_C_64b

Circular FIFO buffer of generic type that works with 64 bit values (based on LWORD). Allows Enqueuing when there is a free space in front of the tail. Strings and data structures are not supported.

2.4.154.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.154.0.2 Incode documentation

Developed entirely with methods

2.4.154.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	28

2.4.154.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.154.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value that has to be casted to correct destination type

2.4.154.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	LWORD	Value to add to queue

2.4.154.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.154.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.154.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	LWORD	Return value that has to be casted to correct destination type

2.4.155 FIFO_FWFT_8b

First word fall through FIFO buffer of generic type that works with 8 bit values (based on WORD). After Dequeueing the whole array is shifted one space to the left so the next element is always at the beginning. Strings and data structures are not supported.

2.4.155.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BYTE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.155.0.2 Incode documentation Developed entirely with methods

2.4.155.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.155.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.155.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value that has to be casted to correct destination type

2.4.155.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	BYTE	Value to add to queue

2.4.155.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.155.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.155.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	BYTE	Return value that has to be casted to correct destination type

2.4.156 FIFO_FWFT_16b

First word fall through FIFO buffer of generic type that works with 16 bit values (based on WORD). After Dequeueing the whole array is shifted one space to the left so the next element is always at the beginning. Strings and data structures are not supported.

2.4.156.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO WORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.156.0.2 Incode documentation Developed entirely with methods

2.4.156.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.156.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.156.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value that has to be casted to correct destination type

2.4.156.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	WORD	Value to add to queue

2.4.156.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.156.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.156.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	WORD	Return value that has to be casted to correct destination type

2.4.157 FIFO_FWFT_32b

First word fall through FIFO buffer of generic type that works with 32 bit values (based on DWORD). After Dequeueing the whole array is shifted one space to the left so the next element is always at the beginning. Strings and data structures are not supported.

2.4.157.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.157.0.2 Incode documentation Developed entirely with methods

2.4.157.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.157.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.157.1.1 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value that has to be casted to correct destination type

2.4.157.1.2 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	DWORD	Value to add to queue

2.4.157.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.157.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.157.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	DWORD	Return value that has to be casted to correct destination type

2.4.158 FIFO_FWFT_64b

First word fall through FIFO buffer of generic type that works with 64 bit values (based on LWORD). After Dequeueing the whole array is shifted one space to the left so the next element is always at the beginning. Strings and data structures are not supported.

2.4.158.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.158.0.2 Incode documentation

Developed entirely with methods

2.4.158.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	22	1	31	28

2.4.158.1 Methods

- Dequeue
- Enqueue
- isEmpty
- isFull
- Peek

2.4.158.1.1 Method Dequeue : BOOL

Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value that has to be casted to correct destination type

2.4.158.1.2 Method Enqueue : BOOL

Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	LWORD	Value to add to queue

2.4.158.1.3 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.158.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.158.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	LWORD	Return value that has to be casted to correct destination type

2.4.159 LIFO_16b

LIFO / Stack buffer of generic type that works with 16 bit values (based on WORD). Pushing places new value on top of the stack and popping removes the element from the top. Strings and data structures are not supported.

2.4.159.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO WORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.159.0.2 Incode documentation Developed entirely with methods

2.4.159.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.159.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.159.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value that has to be casted to correct destination type

2.4.159.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	WORD	Value to add to the stack

2.4.159.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.159.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.159.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	WORD	Return value that has to be casted to correct destination type

2.4.160 LIFO_32b

LIFO / Stack buffer of generic type that works with 32 bit values (based on DWORD). Pushing places new value on top of the stack and popping removes the element from the top. Strings and data structures are not supported.

2.4.160.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.160.0.2 Incode documentation Developed entirely with methods

2.4.160.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.160.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.160.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value that has to be casted to correct destination type

2.4.160.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	DWORD	Value to add to the stack

2.4.160.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.160.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.160.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	DWORD	Return value that has to be casted to correct destination type

2.4.161 LIFO_64b

LIFO / Stack buffer of generic type that works with 64 bit values (based on LWORD). Pushing places new value on top of the stack and popping removes the element from the top. Strings and data structures are not supported.

2.4.161.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.161.0.2 Incode documentation Developed entirely with methods

2.4.161.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.161.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.161.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value that has to be casted to correct destination type

2.4.161.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	LWORD	Value to add to the stack

2.4.161.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.161.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.161.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	LWORD	Return value that has to be casted to correct destination type

2.4.162 LIFO_8b

LIFO / Stack buffer of generic type that works with 8 bit values (based on BYTE). Pushing places new value on top of the stack and popping removes the element from the top. Strings and data structures are not supported.

2.4.162.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BYTE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.162.0.2 Incode documentation Developed entirely with methods

2.4.162.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 1

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	20	1	27	27

2.4.162.1 Methods

- Pop
- Push
- isEmpty
- isFull
- Peek

2.4.162.1.1 Method Pop : BOOL Returns the top LIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value that has to be casted to correct destination type

2.4.162.1.2 Method Push : BOOL Inserts new value on the top of the LIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR.INPUT	Value	BYTE	Value to add to the stack

2.4.162.1.3 Method isEmpty : BOOL Returns TRUE if LIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.162.1.4 Method isFull : BOOL Returns TRUE if LIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.162.1.5 Method Peek : UINT Returns the index of the next element to Pop. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR.OUTPUT	Value	BYTE	Return value that has to be casted to correct destination type

2.4.163 FIFO_S_8b

Standard FIFO buffer of generic type that works with 8 bit values (based on BYTE). Allows Enqueing if buffer is not full. After being filled, it has to be emptied completely before further equeueing. Strings and data structures are not supported.

2.4.163.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO BYTE	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.163.0.2 Incode documentation Developed entirely with methods

2.4.163.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.163.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.163.1.1 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.163.1.2 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value that has to be casted to correct destination type

2.4.163.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	BYTE	Value to add to queue

2.4.163.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.163.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	BYTE	Return value that has to be casted to correct destination type

2.4.164 FIFO_S_32b

Standard FIFO buffer of generic type that works with 32 bit values (based on DWORD). Allows Enqueing if buffer is not full. After being filled, it has to be emptied completely before further equeueing. Strings and data structures are not supported.

2.4.164.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO DWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.164.0.2 Incode documentation Developed entirely with methods

2.4.164.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.164.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.164.1.1 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.164.1.2 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value that has to be casted to correct destination type

2.4.164.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	DWORD	Value to add to queue

2.4.164.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.164.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	DWORD	Return value that has to be casted to correct destination type

2.4.165 FIFO_S_64b

Standard FIFO buffer of generic type that works with 64 bit values (based on LWORD). Allows Enqueing if buffer is not full. After being filled, it has to be emptied completely before further equeueing. Strings and data structures are not supported.

2.4.165.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO LWORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.165.0.2 Incode documentation Developed entirely with methods

2.4.165.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.165.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.165.1.1 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.165.1.2 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value that has to be casted to correct destination type

2.4.165.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	LWORD	Value to add to queue

2.4.165.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.165.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	LWORD	Return value that has to be casted to correct destination type

2.4.166 FIFO_S_16b

Standard FIFO buffer of generic type that works with 16 bit values (based on WORD). Allows Enqueing if buffer is not full. After being filled, it has to be emptied completely before further equeueing. Strings and data structures are not supported.

2.4.166.0.1 Interface

Direction	Name	Type	Documentation
VAR_INPUT	Buffer	POINTER TO WORD	Externally allocated buffer. Must be in format ARRAY[0..N]. ! Block doesn't check for Null pointer
VAR_INPUT	Size	UINT	Size/Max elements of the buffer
VAR_OUTPUT	NrElements	UINT	Number of elements in the FIFO

2.4.166.0.2 Incode documentation Developed entirely with methods

2.4.166.0.3 Metrics

- VAR_INPUT : 2
- VAR_OUTPUT : 1
- VAR : 2

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	5	28	2	40	36

2.4.166.1 Methods

- isEmpty
- Dequeue
- Enqueue
- isFull
- Peek

2.4.166.1.1 Method isEmpty : BOOL Returns TRUE if FIFO is empty. Reading not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.166.1.2 Method Dequeue : BOOL Returns the next FIFO element stored in the buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value that has to be casted to correct destination type

2.4.166.1.3 Method Enqueue : BOOL Inserts new value into the FIFO buffer

Method Interface

Direction	Name	Type	Documentation
VAR_INPUT	Value	WORD	Value to add to queue

2.4.166.1.4 Method isFull : BOOL Returns TRUE if FIFO is full. Inserting not allowed

Method Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

2.4.166.1.5 Method Peek : UINT Returns the index of the next element to Dequeue. Output paramter holds the element without removing it from the Buffer

Method Interface

Direction	Name	Type	Documentation
VAR_OUTPUT	Value	WORD	Return value that has to be casted to correct destination type

Chapter 3

Documentation for namespace CODESYS_Control_Win_V3_x64

3.1 Namespace index

- Programs

- FIFO_S_ManTest
- FIFO_C_ManTest
- FIFO_FWFT_ManTest
- FIFO_UP_ManTest
- LIFO_ManTest
- FIFO_C_UnitTest
- FIFO_S_UnitTest
- FIFO_FWFT_UnitTest
- FIFO_UP_UnitTest
- FIFO_OP_UnitTest
- LIFO_UnitTest
- FIFO_OP_ManTest

3.2 Metrics

Data types	Programs	Function Blocks	Functions	Classes
0	12	0	0	0

Lines of code	Lines of comments	Lines in total	Maintainable size
428	101	651	632

3.3 Programs

3.3.1 FIFO_S_ManTest

Manual tests for function block FIFO_S_Int

3.3.1.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.1.0.2 Metrics

- VAR : 14

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	23	3	31	37

3.3.2 FIFO_C_ManTest

Manual tests for function block FIFO_C.Int

3.3.2.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.2.0.2 Metrics

- VAR : 14

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	26	3	34	40

3.3.3 FIFO_FWFT_ManTest

Manual tests for function block FIFO_FWFT_Int

3.3.3.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.3.0.2 Metrics

- VAR : 14

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	24	3	32	38

3.3.4 FIFO_UP_ManTest

Manual tests for function block FIFO_UP_Int

3.3.4.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.4.0.2 Metrics

- VAR : 17

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	26	3	34	43

3.3.5 LIFO_ManTest

Manual tests for function block LIFO_Int

3.3.5.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.5.0.2 Metrics

- VAR : 14

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	23	3	31	37

3.3.6 FIFO_C_UnitTest

Automated unit tests for function block FIFO_C

3.3.6.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.6.0.2 Incode documentation List of tests Test1: Fifo returns TRUE on successfull enqueue Test2: Fifo fills three values correctly Test3: Fifo reports FULL when full Test4: Fifo reports FALSE on unsuccesfull enqueue Test5: Fifo returns TRUE on successfull dequeue Test6: Fifo dequeues values correctly Test7: Fifo can count correctly Test8: Fifo reports EMPTY when EMPTY Test9: Fifo reports FALSE on unsuccesfull dequeue Test10: Fifo circulates to index 0 after being full and one item dequeued Test11: Peek functionality: Should return the next element but not remove it, it should report correct index of the buffer Test12: 16bit handling: Multiple types should be returned

3.3.6.0.3 Metrics

- VAR : 19

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	51	14	81	70

3.3.7 FIFO_S_UnitTest

Automated unit tests for function block FIFO_S

3.3.7.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.7.0.2 Incode documentation List of tests Test1: Fifo returns TRUE on successfull enqueue Test2: Fifo fills three values correctly Test3: Fifo reports FULL when full Test4: Fifo reports FALSE on unsuccesfull enqueue Test5: Fifo returns TRUE on successfull dequeue Test6: Fifo dequeues values correctly Test7: Fifo can count correctly Test8: Fifo reports EMPTY when EMPTY Test9: Fifo reports FALSE on unsuccesfull dequeue Test10: Fifo prevents enqueue if its full Test11: Able to enqueue again only after empty flag Test12: Peek functionality: Should return the next element but not remove it, it should report correct index of the buffer Test13: 16bit handling: Multiple types should be returned

3.3.7.0.3 Metrics

- VAR : 21

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	59	15	92	80

3.3.8 FIFO_FWFT_UnitTest

Automated unit tests for function block FIFO_FWFT

3.3.8.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.8.0.2 Incode documentation List of tests Test1: Fifo returns TRUE on successfull enqueue Test2: Fifo fills three values correctly Test3: Fifo reports FULL when full Test4: Fifo reports FALSE on unsuccesfull enqueue Test5: Fifo returns TRUE on successfull dequeue Test6: Fifo dequeues values correctly Test7: Fifo can count correctly Test8: Fifo reports EMPTY when EMPTY Test9: Fifo reports FALSE on unsuccesfull dequeue Test10: Fifo first word fall trough is working Test11: Peek functionality: Should return the next element but not remove it, it should report correct index of the buffer Test12: 16bit handling: Multiple types should be returned

3.3.8.0.3 Metrics

- VAR : 19

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	50	14	80	69

3.3.9 FIFO_UP_UnitTest

Automated unit tests for function block FIFO_UP_Int

3.3.9.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.9.0.2 Incode documentation List of tests Test1: Fifo returns TRUE on successfull enqueue Test2: Fifo fills three values correctly Test3: Fifo reports FULL when full Test4: Fifo reports FALSE on unsuccesfull enqueue Test5: Fifo returns TRUE on successfull dequeue Test6: Fifo dequeues values correctly Test7: Fifo can count correctly Test8: Fifo reports EMPTY when EMPTY Test9: Fifo reports FALSE on unsuccesfull dequeue Test10: Fifo returns the highest priority value first Test11: Peek functionality: Should return the next element but not remove it, it should report correct index of the buffer

3.3.9.0.3 Metrics

- VAR : 18

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	37	13	63	55

3.3.10 FIFO_OP_UnitTest

Automated unit tests for function block FIFO_OP_Int

3.3.10.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.10.0.2 Incode documentation List of tests Test1: Fifo returns TRUE on successfull enqueue Test2: Fifo fills three values correctly Test3: Fifo reports FULL when full Test4: Fifo reports FALSE on unsuccesfull enqueue Test5: Fifo returns TRUE on successfull dequeue Test6: Fifo dequeues values correctly Test7: Fifo can count correctly Test8: Fifo reports EMPTY when EMPTY Test9: Fifo reports FALSE on unsuccesfull dequeue Test10: Fifo returns the highest priority value first Test11: Fifo has ordered the buffer correctly according to priority. The buffer is lowest : highest = 0 : N Test12: Peek functionality: Should return the next element but not remove it, it should report correct index of the buffer

3.3.10.0.3 Metrics

- VAR : 19

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	38	14	66	57

3.3.11 LIFO_UnitTest

Automated unit tests for function block LIFO

3.3.11.0.1 Interface

Direction	Name	Type	Documentation
-----------	------	------	---------------

3.3.11.0.2 Incode documentation List of tests Test1: Lifo returns TRUE on successfull Push Test2: Lifo fills three values correctly Test3: Lifo reports FULL when full Test4: Lifo reports FALSE on unsuccesfull Push Test5: Lifo returns TRUE on successfull Pop Test6: Lifo dequeues values correctly Test7: Lifo can count correctly Test8: Lifo reports EMPTY when EMPTY Test9: Lifo reports FALSE on unsuccesfull Pop Test10: Peek functionality: Should return the next element but not remove it, it should report correct index of the buffer Test11: 16bit handling: Multiple types should be returned

3.3.11.0.3 Metrics

- VAR : 18

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	45	13	73	63

3.3.12 FIFO_OP_ManTest

Manual tests for function block FIFO_OP_Int

3.3.12.0.1 Interface

Direction	Name	Type	Documentation
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3.3.12.0.2 Metrics

- VAR : 17

Actions	Methods	Lines of code	Lines of comments	Lines in total	Maintainable size
0	0	26	3	34	43