Audio
Library Documentation
X2C v6.1.1780

January 6, 2020

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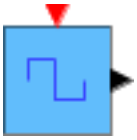
Block: RectangleWave



Outports	
u	Rectangle wave output

Mask Parameters	
Amplitude	Amplitude of wave
Frequency	Frequency in Hz
Offset	Offset
Duty	Duty Cycle in %
ts_fact	Multiplication factor of base sampling time (in integer format)

Description:

Generation of a rectangular wave.

Implementations:

FiP8	8 Bit Fixed Point Implementation
FiP16	16 Bit Fixed Point Implementation
FiP32	32 Bit Fixed Point Implementation
Float32	32 Bit Floating Point Implementation
Float64	64 Bit Floating Point Implementation

Implementation: FiP8

8 Bit Fixed Point Implementation

Outports Data Type	
u	int8

Implementation: FiP16

16 Bit Fixed Point Implementation

Outports Data Type	
u	int16

Implementation: FiP32

32 Bit Fixed Point Implementation

Outports Data Type	
u	int32

Implementation: Float32

32 Bit Floating Point Implementation

Outports Data Type	
u	float32

Implementation: Float64

64 Bit Floating Point Implementation

Outports Data Type	
u	float64

Block: SineWave

Outports	
u	Sine wave output

Mask Parameters	
Amplitude	Amplitude of wave
Frequency	Frequency in Hz
Offset	Offset
Phase	Phase [-Pi..Pi]
ts_fact	Multiplication factor of base sampling time (in integer format)

Description:

Generation of a sine wave.

Implementations:

FiP8	8 Bit Fixed Point Implementation
FiP16	16 Bit Fixed Point Implementation
FiP32	32 Bit Fixed Point Implementation
Float32	32 Bit Floating Point Implementation
Float64	64 Bit Floating Point Implementation

Implementation: FiP8

8 Bit Fixed Point Implementation

Outports Data Type	
u	int8

Implementation: FiP16

16 Bit Fixed Point Implementation

Outports Data Type	
u	int16

Implementation: FiP32

32 Bit Fixed Point Implementation

Outports Data Type	
u	int32

Implementation: Float32

32 Bit Floating Point Implementation

Outports Data Type	
u	float32

Implementation: Float64

64 Bit Floating Point Implementation

Outports Data Type	
u	float64

Block: TriangleWave

Outports	
u	Triangle wave output

Mask Parameters	
Amplitude	Amplitude of wave
Frequency	Frequency in Hz
Offset	Offset
Phase	Phase [-Pi..Pi]
ts_fact	Multiplication factor of base sampling time (in integer format)

Description:

Generation of a triangular wave.

Implementations:

FiP8	8 Bit Fixed Point Implementation
FiP16	16 Bit Fixed Point Implementation
FiP32	32 Bit Fixed Point Implementation
Float32	32 Bit Floating Point Implementation
Float64	64 Bit Floating Point Implementation

Implementation: FiP8

8 Bit Fixed Point Implementation

Outports Data Type	
u	int8

Implementation: FiP16

16 Bit Fixed Point Implementation

Outports Data Type	
u	int16

Implementation: FiP32

32 Bit Fixed Point Implementation

Outports Data Type	
u	int32

Implementation: Float32

32 Bit Floating Point Implementation

Outports Data Type	
u	float32

Implementation: Float64

64 Bit Floating Point Implementation

Outports Data Type	
u	float64