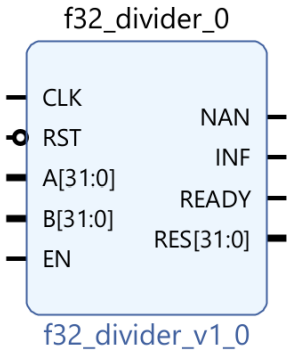
IEEE754 single precision floating point (f32) support Divider



This IP computes the division of input A by input B (in IEEE754 single precision floating point format). The result is also in the same format:

RES = A / B

Depending on the input value(s), the result can be NaN or Infinite. This case is shown by NAN and INF outputs.

All Input/Output descriptions can be found in the following table.

Pin name	Description	Direction	Property
CLK	CLK input	IN	1bit
RST	Reset input	IN	1bit, active High
EN	Enable	IN	1bit, active High
A	Dividend operand	IN	32bit, IEEE754 single precision floating point format
B	Divisor operand	IN	32bit, IEEE754 single precision floating point format
RES	Division Result	OUT	32bit, IEEE754 single precision floating point format
READY	Result is valid and ready	OUT	1bit, active High
NAN	Result is not valid: NaN	OUT	1bit, active High
INF	Result is not +/- Infinite	OUT	1bit, active High