

Type	Symbol	Description	Note
Arithmetic	+	add	
	-	subtract	
	*	multiply	
	/	divide	may not synthesize
	%	modulus (remainder)	may not synthesize
	**	power	may not synthesize
Bitwise	~	not	
		or	
	&	and	
	^	xor	
	~& or &~	nand	mix two operators
Relational	>	greater than	
	<	less than	
	>=	greater than or equal	
	<=	less than or equal	
	==	equal	
	!=	not equal	
Logical	!	negation	
		logical OR	
	&&	logical AND	
Shift operator	>>	right shift	
	<<	left shift	
	>>>	right shift with MSB shifted to right	
	<<<	same as <<	
Concatenation	{ }	Concatenation	
	{ { } }	Replication	e.g. { 2{3} } = {3, 3}
Conditional	? :	conditional	e.g. (2>3) ? 1 : 0
Sign-format	\$unsigned()	signed to unsigned conversion	\$unsigned(-3)
	\$signed()	unsigned to signed conversion	\$signed(3)