

Common SSE Instructions

<code>movss, movsd</code>	Copies a scalar floating-point value between two XMM registers or between a memory location and an XMM register.
<code>movapd</code>	move two aligned packed double-precision floating-point values between XMM registers and memory
<code>movhpd</code>	move high packed double-precision floating-point value to or from the high quadword of an XMM register and memory
<code>movlpd</code>	move low packed single-precision floating-point value to or from the low quadword of an XMM register and memory
<code>addss, addsd</code>	Performs a scalar addition using the specified operands.
<code>subss, subsd</code>	Performs a scalar subtraction using the specified operands. Source operand is subtracted from destination operand.
<code>mulss, mulsd</code>	Performs a scalar multiplication using the specified operands.
<code>divss, divsd</code>	Performs a scalar division using the specified operands. Destination operand is divided by source operand.
<code>sqrtps, sqrtsd</code>	Computes the square root of the specified source operand.
<code>maxss, maxsd</code>	Compares the source and destination operands and saves the larger value in the destination operand.
<code>minss, minsd</code>	Compares the source and destination operands and saves the smaller value in the destination operand.
<code>cvtss2ss</code>	Converts a DPFP value to a SPFP value. The source operand can be a memory location or an XMM register. The destination operand must be an XMM register.
<code>cvtss2sd</code>	Converts a SPFP value to a DPFP value. The source operand can be a memory location or an XMM register. The destination operand must be an XMM register.
<code>cvtsi2ss, cvtsi2sd</code>	Converts a signed-dword integer to a floating-point value. The source operand can be a memory location or a general-purpose register. The destination operand must be an XMM register.
<code>cvtss2si, cvtsd2si</code>	Converts a floating-point value to a signed doubleword integer. The source operand can be a memory location or an XMM register. The destination operand must be a general-purpose register.
<code>cvttsd2si</code>	Convert with truncation scalar double-precision floating-point values to scalar doubleword integers.
<code>cvtttpd2pi</code>	convert with truncation packed double-precision floating-point values to packed doubleword integers

cvttq2pd	convert with truncation packed doubleword integers to packed doubleword integers.
cvtps2pd	convert packed single-precision floating-point values to packed double-precision floating-point values
andnpd	perform bitwise logical AND NOT of packed double-precision floating-point values
andpd	perform bitwise logical AND of packed double-precision floating-point values
orpd	perform bitwise logical OR of packed double-precision floating-point values
xorpd	perform bitwise logical XOR of packed double-precision floating-point values
andnps	perform bitwise logical AND NOT of packed single-precision floating-point values
orps	perform bitwise logical OR of packed single-precision floating-point values
pavgb	compute average of packed unsigned byte integers
pavgw	compute average of packed unsigned word integers
cmpss	compare packed single-precision floating-point values
cmpsd	compare scalar single-precision floating-point values
comiss	perform ordered comparison of scalar single-precision floating-point values and set flags in EFLAGS register
ucomiss	perform unordered comparison of scalar single-precision floating-point values and set flags in EFLAGS register
movd2q	move doubleword integer from MMX to XMM registers
movdqa	move aligned double quadword
movdqu	move unaligned double quadword
movq2dq	move quadword integer from MMX to XMM registers
movdq2q	move quadword integer from XMM to MMX registers
pmuludq	multiply packed unsigned doubleword integers
shufps	shuffles values in packed single-precision floating-point operands
unpckhps	unpacks and interleaves the two high-order values from two single-precision floating-point operands
unpcklps	unpacks and interleaves the two low-order values from two single-precision floating-point operands