

Table 8-3. Unsupported Double Extended-Precision Floating-Point Encodings and Pseudo-Denormals

Class		Sign	Biased Exponent	Significand	
				Integer	Fraction
Positive Pseudo-NaNs	Quiet	0	11..11	0	11..11
		$\dot{0}$	$\dot{11}..11$		$\dot{10}..00$
	Signaling	0	11..11	0	01..11
		$\dot{0}$	$\dot{11}..11$		$\dot{00}..01$
Positive Floating Point	Pseudo-infinity	0	11..11	0	00..00
	Unnormals	0	11..10	0	11..11
		$\dot{0}$	$\dot{00}..01$		$\dot{00}..00$
	Pseudo-denormals	0	00..00	1	11..11
		$\dot{0}$	$\dot{00}..00$		$\dot{00}..00$
	Negative Floating Point	Pseudo-denormals	1	00..00	1
$\dot{1}$			$\dot{00}..00$		$\dot{00}..00$
Unnormals		1	11..10	0	11..01
		$\dot{1}$	$\dot{00}..01$		$\dot{00}..00$
Pseudo-infinity		1	11..11	0	00..00
		$\dot{1}$	$\dot{11}..11$		$\dot{00}..00$
Negative Pseudo-NaNs	Signaling	1	11..11	0	01..11
		$\dot{1}$	$\dot{11}..11$		$\dot{00}..01$
	Quiet	1	11..11	0	11..11
		$\dot{1}$	$\dot{11}..11$		$\dot{10}..00$
			← 15 bits →		← 63 bits →

8.3 X86 FPU INSTRUCTION SET

The floating-point instructions that the x87 FPU supports can be grouped into six functional categories:

- Data transfer instructions
- Basic arithmetic instructions
- Comparison instructions
- Transcendental instructions