

Group对照表

mod R/M	xx000xxx	xx001xxx	xx010xxx	xx011xxx	xx100xxx	xx101xxx	xx110xxx	xx111xxx
group #1 (80h)	ADD Eb,lb	OR Eb,lb	ADC Eb,lb	SBB Eb,lb	AND Eb,lb	SUB Eb,lb	XOR Eb,lb	CMP Eb,lb
group #1 (81h)	ADD Ev,lz	OR Ev,lz	ADC Ev,lz	SBB Ev,lz	AND Ev,lz	SUB Ev,lz	XOR Ev,lz	CMP Ev,lz
group #1 (82h)	ADD* Eb,lb	OR* Eb,lb	ADC* Eb,lb	SBB* Eb,lb	AND* Eb,lb	SUB* Eb,lb	XOR* Eb,lb	CMP* Eb,lb
group #1 (83h)	ADD Ev,lb	OR Ev,lb	ADC Ev,lb	SBB Ev,lb	AND Ev,lb	SUB Ev,lb	XOR Ev,lb	CMP Ev,lb
group #1A (8Fh)	POP <sup>D64</sup> Ev	XOP (000b) XOP (001b) XOP (010b)						
group #2 (C0h) (80186+)	ROL Eb,lb	ROR Eb,lb	RCL Eb,lb	RCR Eb,lb	SHL Eb,lb	SHR Eb,lb	SAL* Eb,lb	SAR Eb,lb
group #2 (C1h) (80186+)	ROL Ev,lb	ROR Ev,lb	RCL Ev,lb	RCR Ev,lb	SHL Ev,lb	SHR Ev,lb	SAL* Ev,lb	SAR Ev,lb
group #2 (D0h)	ROL Eb,1	ROR Eb,1	RCL Eb,1	RCR Eb,1	SHL Eb,1	SHR Eb,1	SAL* Eb,1	SAR Eb,1
group #2 (D1h)	ROL Ev,1	ROR Ev,1	RCL Ev,1	RCR Ev,1	SHL Ev,1	SHR Ev,1	SAL* Ev,1	SAR Ev,1
group #2 (D2h)	ROL Eb,CL	ROR Eb,CL	RCL Eb,CL	RCR Eb,CL	SHL Eb,CL	SHR Eb,CL	SAL* Eb,CL	SAR Eb,CL
group #2 (D3h)	ROL Ev,CL	ROR Ev,CL	RCL Ev,CL	RCR Ev,CL	SHL Ev,CL	SHR Ev,CL	SAL* Ev,CL	SAR Ev,CL
group #3 (F6h)	TEST Eb,lb	TEST* Eb,lb	NOT Eb	NEG Eb	MUL Eb	IMUL Eb	DIV Eb	IDIV Eb
group #3 (F7h)	TEST Ev,lz	TEST* Ev,lz	NOT Ev	NEG Ev	MUL Ev	IMUL Ev	DIV Ev	IDIV Ev
group #4 (FEh)	INC Eb	DEC Eb						
group #5 (FFh)	INC Ev	DEC Ev	CALL <sup>Df64</sup> Ev	CALL Mp (w:z) (or call gate's y)	JMP <sup>Df64</sup> Ev	JMP Mp (w:z) (or call gate's y)	PUSH <sup>D64</sup> Ev	

[illegible]

	MOV Eb,lb							(see CPUID)
group #11 (C7h)	MOV Ev,lz							XBEGIN Jz (F8h)  (see CPUID)
group #12 (0Fh,71h)			PSRLW Nq,lb (MMX) (66h) !VPSRLW Hx,Ux,lb (SSE2)		PSRAW Nq,lb (MMX) (66h) !VPSRAW Hx,Ux,lb (SSE2)		PSSLW Nq,lb (MMX) (66h) !VPSSLW Hx,Ux,lb (SSE2)	
group #12 (EVEX 66h) (0Fh,71h)			VPSRLW Hn {K} {z}, Wn,lb (W=x) (AVX512BW, VL)		VPSRAW Hn {K} {z}, Wn,lb (W=x) (AVX512BW, VL)		VPSLLW Hn {K} {z}, Wn,lb (W=x) (AVX512BW, VL)	
group #13 (0Fh,72h)			PSRLD Nq,lb (MMX) (66h) !VPSRLD Hx,Ux,lb (SSE2)		PSRAD Nq,lb (MMX) (66h) !VPSRAD Hx,Ux,lb (SSE2)		PSLLD Nq,lb (MMX) (66h) !VPSSLD Hx,Ux,lb (SSE2)	
group #13 (MVEX 66h) (0Fh,72h)			VPSRLD Hz {Kw}, Si32r (Wzt),lb (W=0)  (K10M)		VPSRAD Hz {Kw}, Si32r (Wzt),lb (W=0)  (K10M)		VPSLLD Hz {Kw}, Si32r (Wzt),lb (W=0)  (K10M)	
group #13 (EVEX 66h) (0Fh,72h)	VPRORD Hn {K} {z}, B32 (Wn),lb (W=0) VPRORQ Hn {K} {z}, B64 (Wn),lb (W=1) (AVX512F,VL )	VPROLD Hn {K} {z}, B32 (Wn),lb (W=0) VPROLQ Hn {K} {z}, B64 (Wn),lb (W=1) (AVX512F,VL )	VPSRLD Hn {K} {z}, B32 (Wn),lb (W=0) (AVX512F,VL )		VPSRAD Hn {K} {z}, B32 (Wn),lb (W=0) VPSRAQ Hn {K} {z}, B64 (Wn),lb (W=1) (AVX512F,VL )		VPSLLD Hn {K} {z}, B32 (Wn),lb (W=0) (AVX512F,VL )	
group #14 (0Fh,73h)			PSRLQ Nq,lb (MMX) (66h) !VPSRLQ Hx,Ux,lb (SSE2)	(66h) !VPSRLDQ Hx,Ux,lb (SSE2)			PSSLQ Nq,lb (MMX) (66h) !VPSSLQ Hx,Ux,lb (SSE2)	(66h) !VPSSLDQ Hx,Ux,lb (SSE2)
group #14 (EVEX 66h) (0Fh,73h)			VPSRLQ Hn {K} {z}, B64 (Wn),lb (W=1) (AVX512F,VL )	VPSRLDQ Hn, Wn,lb (W=x) (AVX512BW, VL)			VPSLLQ Hn {K} {z}, B64 (Wn),lb (W=1) (AVX512F,VL )	VPSLLDQ Hn, Wn,lb (W=x) (AVX512BW, VL)
group #15 (0Fh,AEh)	FXSAVE M (see CPUID)	FXRSTOR M (see CPUID)	VLDMXCSR Md (SSE)	VSTMXCSR Md (SSE)	XSAVE M (n/a) (see CPUID)	XRSTOR M (n/a) (see CPUID)	XSAVEOPT M (n/a) (see CPUID)	CLFLUSH M (n/a) (see CPUID)

							CLWB M (66h) (see CPUID)	CLFLUSHOP T M (66h) (see CPUID)
					PTWRITE My (F3h) (see CPUID)	SETSSBSY Mq (F3h) (see CPUID)	CLRSSBSY Mq (F3h) (see CPUID)	
	RDFSBASE Ry (F3h) (see CPUID)	RDGSBASE Ry (F3h) (see CPUID)	WRFSBASE Ry (F3h) (see CPUID)	WRGSBASE Ry (F3h) (see CPUID)	PTWRITE Ry (F3h) (see CPUID)	LFENCE <sup>#r/m</sup> (n/a) (SSE2- MEM)	MFENCE <sup>#r/m</sup> (n/a) (SSE2- MEM)	SFENCE <sup>#r/m</sup> (n/a) (SSE- MEM) PCOMMIT (F8h) (66h) (see CPUID)
group #15 (VEX F2h) (0Fh,AEh)							SPFLT Ry (K10M)	CLEVICT0 M (K10M)
group #15 (MVEX F2h) (0Fh,AEh)								CLEVICT0 M (K10M)
group #15 (VEX F3h) (0Fh,AEh)							DELAY Ry (K10M)	CLEVICT1 M (K10M)
group #15 (MVEX F3h) (0Fh,AEh)								CLEVICT1 M (K10M)
group #16 (0Fh,18h)	PREFETCHN TA M (SSE-MEM) HINT_NOP Rv (P6+)	PREFETCH 0 M (SSE-MEM) HINT_NOP Rv (P6+)	PREFETCH 1 M (SSE-MEM) HINT_NOP Rv (P6+)	PREFETCH 2 M (SSE-MEM) HINT_NOP Rv (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)
group #16 (VEX) (0Fh,18h)	VPREFETCH NTA M (K10M)	VPREFETCH TO M (K10M)	VPREFETCH T1 M (K10M)	VPREFETCH T2 M (K10M)	VPREFETCH ENTA M (K10M)	VPREFETCH ET0 M (K10M)	VPREFETCH ET1 M (K10M)	VPREFETCH ET2 M (K10M)
group #16 (MVEX) (0Fh,18h)	VPREFETCH NTA M (K10M)	VPREFETCH TO M (K10M)	VPREFETCH T1 M (K10M)	VPREFETCH T2 M (K10M)	VPREFETCH ENTA M (K10M)	VPREFETCH ET0 M (K10M)	VPREFETCH ET1 M (K10M)	VPREFETCH ET2 M (K10M)

group #16 (0Fh,19h)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)
group #16 (0Fh,1Ah)	(n/a) BNDLDX rB,M.ib (MPX) (66h) BNDMOV rB,mB/M (MPX) (F3h) BNDCL rB,Ey (MPX) (F2h) BNDCU rB,Ey (MPX)							
group #16 (0Fh,1Bh)	(n/a) BNDSTX M.ib,rB (MPX) (66h) BNDMOV mB/M,rB (MPX) (F3h) BNDMK rB,My (MPX) (F2h) BNDCN rB,Ey (MPX)							
group #16 (0Fh,1Ch)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)
group #16 (0Fh,1Dh)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)
group #16 (0Fh,1Eh)	HINT_NOP E[bv] (P6+)	(F3h) RDSSPD Rd  (F3h) RDSSPQ Rq  (see CPUID)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	(F3h) ENDBR64 (FAh) (F3h) ENDBR32 (FBh)  (see CPUID)
group #16 (0Fh,1Fh)	NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)	HINT_NOP E[bv] (P6+)
group #17 (VEX) (0F 38 F3)		BLSR <sup>v</sup> By,Ey (BMI)	BLSMSK <sup>v</sup> By,Ey (BMI)	BLSI <sup>v</sup> By,Ey (BMI)				
group #18 (MVEX 66) (0F 38 C6)	VGATHER- PF0HINTDP S Uf32 (Mdt.z) {Kw.!0} (W=0)  VGATHER- PF0HINTDP D Uf64 (Mqt.z.y) {Kw.!0} (1)  (K1OM,VSIB)	VGATHER- PF0DPS Uf32 (Mdt.z) {Kw.!0} (W=0)  (K1OM,VSIB)	VGATHER- PF1DPS Uf32 (Mdt.z) {Kw.!0} (W=0)  (K1OM,VSIB)		VSCATTER- PF0HINTDP S Uf32 (Mdt.z) {Kw.!0} (W=0)  VSCATTER- PF0HINTDP D Uf64 (Mqt.z.y) {Kw.!0} (1)  (K1OM,VSIB)	VSCATTER- PF0DPS Uf32 (Mdt.z) {Kw.!0} (W=0)  (K1OM,VSIB)	VSCATTER- PF1DPS Uf32 (Mdt.z) {Kw.!0} (W=0)  (K1OM,VSIB)	
group #18 (EVEX 66) (0F 38 C6)		VGATHER- PF0DPS Md.n {K.!0} (W=0)  VGATHER- PF0DPD Mq.h {K.!0} (W=1) (A`PF,VL,VSIB)	VGATHER- PF1DPS Md.n {K.!0} (W=0)  VGATHER- PF1DPD Mq.h {K.!0} (W=1) (A`PF,VL,VSIB)			VSCATTER- PF0DPS Md.n {K.!0} (W=0)  VSCATTER- PF0DPD Mq.h {K.!0} (W=1) (A`PF,VL,VSIB)	VSCATTER- PF1DPS Md.n {K.!0} (W=0)  VSCATTER- PF1DPD Mq.h {K.!0} (W=1) (A`PF,VL,VSIB)	
group #18 (EVEX 66) (0F 38 C7)		VGATHER- PF0QPS Md.n {K.!0} (W=0)  VGATHER-	VGATHER- PF1QPS Md.n {K.!0} (W=0)  VGATHER-			VSCATTER- PF0QPS Md.n {K.!0} (W=0)  VSCATTER-	VSCATTER- PF1QPS Md.n {K.!0} (W=0)  VSCATTER-	

		PF0QPD Mq.n {K.!0} (W=1) (A`PF,VL,VSI B)	PF1QPD Mq.n {K.!0} (W=1) (A`PF,VL,VSI B)			PF0QPD Mq.n {K.!0} (W=1) (A`PF,VL,VSI B)	PF1QPD Mq.n {K.!0} (W=1) (A`PF,VL,VSI B)	
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