

MR16 インストラクションデコードマップ

	PFX(プレフィックス)コード			命令コード										命令	
	7	6	5:0	15:14	13:12	11:8	7	6	5	4	3	2	1		0
1 命令	---	---	---	00	00	1111	IFL	ZFL	CFL	FD	x	x	x	0	RET [CLx/STx]
	---	---	---	00	00	1111	RB			x	x	x	1	POP RB	
	---	---	---	00	00	RA(0-14)	RB			DISP4			LDM RB,(RA,#DISP4:4)		
	---	---	---	00	01	1111	RB			x	x	x	1	PUSH RB	
	---	---	---	00	01	RA(0-14)	RB			DISP4			STM (RA,#DISP4:4),RB		
-	---	---	00	10	0111	PFX						2words instruction			
1 ワード 命令	---	---	---	00	10	CC	REL8						B(CC) PC+REL8		
	---	---	---	00	11	1111	IFL	ZFL	CFL	FD	0	0	0	0	NOP / CLx / STx
	---	---	---	00	11	RA(0-14)	ANY			0	0	0	0	Reserved	
	---	---	---	00	11	RA	SMOD			0	0	0	1	Reserved(SHIFT)	
	---	---	---	00	11	CC	RB			0	0	1	0	J(CC) RB	
	---	---	---	00	11	1111	RB			0	0	1	1	JSR RB	
	---	---	---	00	11	RA	RB			0	1	LMOD		AND/OR/XOR/MOV RA,RB	
	---	---	---	00	11	RA	RB			1	0	AMOD		ADD/SUB/ADC/SBC RA,RB	
	---	---	---	00	11	RA	RB			1	1	TMOD		TST/CMP/MLT/MLH RA,RB	
	---	---	---	01	LMOD	RA	IMM8						AND/OR/XOR/MOV RA,#IMM8:8		
	---	---	---	10	AMOD	RA	IMM8						ADD/SUB/ADC/SBC RA,#IMM8:8		
	---	---	---	11	TMOD	RA	IMM8						TST/CMP/MLT/MLH RA,#IMM8:8		
2 ワード 命令	0	DISP11[0]	DISP11[8:4]	00	00	RA(0-14)	RB			DISP11[4:1]			LDW RB,(RA,#DISP11:11)		
	0	DISP11[0]	DISP11[8:4]	00	01	RA(0-14)	RB			DISP11[4:1]			STW (RA,#DISP11:11),RB		
	1	DISP11[0]	DISP11[8:4]	00	00	RA(0-14)	RB			DISP11[4:1]			LDB RB,(RA,#DISP11:11)		
	1	DISP11[0]	DISP11[8:4]	00	01	RA(0-14)	RB			DISP11[4:1]			STB (RA,#DISP11:11),RB		
	ABS15[15:8]			00	10	CC	ABS[7:1]				0	J(CC) ABS15			
	ABS15[15:8]			00	10	1111	ABS[7:1]				1	JSR ABS15			
	ANY			00	11	ANY						Reserved			
	IMM16[15:8]			01	LMOD	RA	IMM16[7:0]						AND/OR/XOR/MOV RA,#IMM16:8		
	IMM16[15:8]			10	AMOD	RA	IMM16[7:0]						ADD/SUB/ADC/SBC RA,#IMM16:8		
	IMM16[15:8]			11	TMOD	RA	IMM16[7:0]						TST/CMP/MLT/MLH RA,#IMM16:8		