Rd - <2:0> Rt - <10:8>

Rn - <5:3> RHn - <6:3>

Rm - <8:6> RHd - <7> # <2:0>

Instruction	cRegSel			cRand2	cShift		cAluSel	cMem		cWFlags		cWLink
	A	B	C		Op	Amt		Rd	Wr		cWReg	
lsls i5	-	Rn	Rd	RegB	Lsl	ShImm	Mov	F	F	T	Y	N
lsrs i5	-	Rn	Rd	RegB	Lsr	ShImm	Mov	F	F	T	Y	N
asrs i5	-	Rn	Rd	RegB	Asr	ShImm	Mov	F	F	T	Y	N
adds/subs i3	Rn	Rm	Rd	RImm3	Lsl	Sh0	Bit9	F	F	T	Y	N
movs i8	-	-	Rt	Imm8	Lsl	Sh0	Mov	F	F	T	Y	N
cmp i8	Rt	-	-	Imm8	Lsl	Sh0	Sub	F	F	T	N	N
adds i8	Rt	-	Rt	Imm8	Lsl	Sh0	Add	F	F	T	Y	N
subs i8	Rt	-	Rt	Imm8	Lsl	Sh0	Sub	F	F	T	Y	N
ands r	Rd	Rn	Rd	RegB	Lsl	Sh0	And	F	F	T	Y	N
eors r	Rd	Rn	Rd	RegB	Lsl	Sh0	Eor	F	F	T	Y	N
lsls r	Rn	Rd	Rd	RegB	Lsl	ShReg	Mov	F	F	T	Y	N
lsrs r	Rn	Rd	Rd	RegB	Lsr	ShReg	Mov	F	F	T	Y	N
asrs r	Rn	Rd	Rd	RegB	Asr	ShReg	Mov	F	F	T	Y	N
adcs r	Rd	Rn	Rd	RegB	Lsl	Sh0	Adc	F	F	T	Y	N
sbcs r	Rd	Rn	Rd	RegB	Lsl	Sh0	Sbc	F	F	T	Y	N
rors r	Rn	Rd	Rd	RegB	Ror	ShReg	Mov	F	F	T	Y	N
tst r	Rd	Rn	-	RegB	Lsl	Sh0	And	F	F	T	N	N
negs r	Rd	Rn	Rd	RegB	Lsl	Sh0	Neg	F	F	T	Y	N
cmp r	Rd	Rn	-	RegB	Lsl	Sh0	Sub	F	F	T	N	N
cmn r	Rd	Rn	-	RegB	Lsl	Sh0	Add	F	F	T	N	N
orrs r	Rd	Rn	Rd	RegB	Lsl	Sh0	Orr	F	F	T	Y	N
muls r	Rd	Rn	Rd	RegB	Lsl	Sh0	Mul	F	F	T	Y	N
bics r	Rd	Rn	Rd	RegB	Lsl	Sh0	Bic	F	F	T	Y	N
mvns r	Rd	Rn	Rd	RegB	Lsl	Sh0	Mvn	F	F	T	Y	N
add hi	RHd	RHn	RHd	RegB	Lsl	Sh0	Add	F	F	F	Y	N
cmp hi	RHd	RHn	-	RegB	Lsl	Sh0	Sub	F	F	T	N	N
mov hi	-	RHn	RHd	RegB	Lsl	Sh0	Mov	F	F	F	Y	N
bx/blx r	-	RHn	Rpc	RegB	Lsl	Sh0	Mov	F	F	F	Y	C
ldr pc	Rpc	-	Rt	Imm8	Lsl	Sh2	Adr	T	F	F	Y	N
str r	Rn	Rm	Rd	RegB	Lsl	Sh0	Add	F	T	F	N	N
ldr r	Rn	Rm	Rd	RegB	Lsl	Sh0	Add	T	F	F	Y	N
str i5	Rn	-	Rd	Imm5	Lsl	Sh2	Add	F	T	F	N	N
ldr i5	Rn	-	Rd	Imm5	Lsl	Sh2	Add	T	F	F	Y	N
str sp	Rsp	-	Rt	Imm8	Lsl	Sh2	Add	F	T	F	N	N
ldr sp	Rsp	-	Rt	Imm8	Lsl	Sh2	Add	T	F	F	Y	N
add pc	Rpc	-	Rt	Imm8	Lsl	Sh2	Adr	F	F	F	Y	N
add sp	Rsp	-	Rt	Imm8	Lsl	Sh2	Add	F	F	F	Y	N
add/sub sp	Rsp	-	Rsp	Imm7	Lsl	Sh2	Bit7	F	F	F	Y	N
b⟨c⟩	Rpc	-	Rpc	SImm8	Lsl	Sh1	Add	F	F	F	C	N
b	Rpc	-	Rpc	SImm11	Lsl	Sh1	Add	F	F	F	Y	N
bl1	Rpc	-	Rlr	SImm11	Lsl	Sh12	Add	F	F	F	Y	N
bl2	Rlr	-	Rpc	Imm11	Lsl	Sh1	Add	F	F	F	Y	Y
mov⟨c⟩	Rn	Rd	Rd	RegB	Lsl	Sh0	Mov	F	F	F	C	N

Figure 17: *Decoding table for all instructions*

ldr' n	Rn	Rm	Rd	RegB	Lsl	Sh2	Add	T	F	F	Y	N
str' n	Rn	Rm	Rd	RegB	Lsl	Sh2	Add	F	T	F	N	N