

指令	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0					
OpCode: AND/EOR/SUB/RSB/ ADD/ADC/SBC/RSC/ TST/TEQ/CMP/CMN/ ORR/MOV/BIC/MVN	Condition field				0	0	I	OpCode				S	Rn				Rd				Operand 2																
MUL/MLA					0	0	0	0	0	0	0	A	S	Rd				Rn				Rs				1	0	1	1	Rm							
UMULL/UMLAL/ SMULL/SMLAL					0	0	0	0	1	U	A	S	RdHi				RdLo				Rs				1	0	0	1	Rm								
MRS					0	0	0	1	0	Ps	0	0	1	1	1	1	Rd				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MSR					0	0	0	1	0	Pd	1	0	1	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	Rm						
MSR(only flag)					0	0	I	1	0	Pd	1	0	1	0	0	0	1	1	1	1	Source operand																
BX					0	0	0	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	Rn					
B/BL					1	0	1	L	Offset																												
SWI					1	1	1	1	Comment field (ignored by Processor)																												
LDRB/STRB/ LDRW/STRW					0	1	I	P	U	B	W	L	Rn				Rd				Offset																
LDRH/STRH/ LDRSB/STRSH					0	0	0	P	U	0	W	L	Rn				Rd				0	0	0	0	1	S	H	1	Rm								
					0	0	0	P	U	1	W	L	Rn				Rd				Offset				1	S	H	1	Offset								
LDM/STM					1	0	0	P	U	S	W	L	Rn				Register list																				
SWP					0	0	0	1	0	B	0	0	Rn				Rd				0	0	0	0	1	0	0	1	Rm								
CDP	1	1	1	0	CP Opc				CRn				CRd				CP#				CP				0	CRm											
MRC/MCR	1	1	1	0	CP Opc				L	CRn				Rd				CP#				CP				1	CRm										
LDC/STC	1	1	0	P	U	N	W	L	Rn				CRd				CP#				Offset																
Undefined	0	1	1	xxxxxxxxxxxxxxxxxxxxxxxxxxxx																											1	xxx					
指令	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0					

ARMV4T	数据处理指令	算术运算指令	ADD、ADC、SUB、SBC、RSB、RSC、MUL、MLA、UMULL、UMLAL、SMULL、SMLAL
		逻辑运算指令	AND(按位与)、EOR(按位异或)、ORR(按位或)、BIC(取反后按位与)
		测试比较指令	TST(AND后更新NZ)、TEQ(EOR后更新NZCV)、CMP(SUB后更新NZCV)、CMN(ADD即取相反数减后更新NZCV)
		数据传送指令	MOV、MVN
	数据存取指令	数据加载指令	LDR、LDM
		数据存储指令	STR、STM
		数据交换指令	SWP
	控制流指令	分支跳转指令	BX、B、BL
		异常产生指令 (软件中断指令)	SWI
	协处理器指令	CDP、MCR、MRC、LDC、STC	

NOTES	AND/EOR/ORR/BIC: Rd = Op1 AND/EOR/OR/AND NOT Op2
	TST/TEQ/CMP/CMN: set CPSR condition codes on Op1 AND/EOR/-/+ Op2
算术指令(加减法)	SUB/RSB/ADD/ADC/SBC/RSC/CMP/CMN
算术指令(乘法法)	MUL/MLA/UMULL/UMLAL/SMULL/SMLAL
逻辑指令(与或非)	AND/EOR/TST/TEQ/ORR/MOV/BIC/MVN
红色数处指令格式	<opcode> {cond} {S} Rd, Rn, <Op2>
绿色数处指令格式	<opcode> {cond} Rn, <Op2>
蓝色数处指令格式	<opcode> {cond} {S} Rd, <Op2>
紫色数处指令格式	<opcode> {cond} {S} Rd, Rm, Rs, Rn / <opcode> {cond} {S} RdLo, RdHi, Rm, Rs
Rd/Rn/Rm/Rs	Rd: Destination register Rn: An operand in a register for an arithmetic Rm/Rs: sama as Rn, use for mul