Cmd	Meaning	Inherent	Immediate	Direct	Exteded	Indx/Indir	Relative	H N Z V C
ABX	Add B to X	$3A (3/1)						- - - - -
ADCA	Add with Carry to A		$89 (2/2)	$99 (4/2)	$B9 (5/3)	$A9 (4+/2+)		* * * * *
ADCB	Add with Carry to B		$C9 (2/2)	$D9 (4/2)	$F9 (5/3)	$E9 (4+/2+)		* * * * *
ADDA	Add to A		$8B (2/2)	$9B (4/2)	$BB (5/3)	$AB (4+/2+)		* * * * *
ADDB	Add to B		$CB (2/2)	$DB (4/2)	$FB (5/3)	$EB (4+/2+)		* * * * *
ADDD	add to AB (16 bit)		$C3 (4/3)	$D3 (6/2)	$F3 (7/3)	$E3 (6+/2+)		- * * * *
ANDA	And with A		$84 (2/2)	$94 (4/2)	$B4 (5/3)	$A4 (4+/2+)		- * * 0 -
ANDB	And with B		$C4 (2/2)	$D4 (4/2)	$F4 (5/3)	$E4 (4+/2+)		- * * 0 -
ANDCC	And with ConditionCode		$1C (3/2)					- - - - 7
ASL	Arithmatic Shift Left			$08 (6/2)	$78 (7/3)	$68 (6+/2+)		8 * * * *
ASLA	Arithmatic Shift Left A	$48 (2/1)						8 * * * *
ASLB	Arithmatic Shift Left B	$58 (2/1)						8 * * * *
ASR	Arithmatic Shift Right			$07 (6/2)	$77 (7/3)	$67 (6+/2+)		8 * * - *
ASRA	Arithmatic Shift Right A	$47 (2/1)						8 * * - *
ASRB	Arithmatic Shift Right B	$46 (2/1)						8 * * - *
BCC	Branch if Carry Clear C=0						$24 (3/2)	- - - - -
BCS	Branch if Carry Set C=1						$25 (3/2)	- - - - -
BEQ	Branch if Equal Z=1						$27 (3/2)	- - - - -
BGE	Branch if Greater than or equal to zero						$2C (3/2)	- - - - -
BGT	Branch if Greater than Zero						$2E (3/2)	- - - - -
BHI	Branch if Higher Z+C=0						$22 (3/2)	- - - - -
BHS	Branch if Higher or Same C=0						$24 (3/2)	- - - - -
BITA	Bit Test A		$85 (2/2)	$95 (4/2)	$B5 (5/3)	$A5 (4+/2+)		8 * * 0 *
BITB	Bit Test B		$C5 (2/2)	$D5 (4/2)	$F5 (5/3)	$E5 (4+/2+)		8 * * 0 *
BLE	Branch if Less than or Equal to Zero						$2F (3/2)	- - - - -
BLO	Branch if Lower C=1						$25 (3/2)	- - - - -
BLS	Branch if Lower or Same C+Z=1						$23 (3/2)	- - - - -
BLT	Branch if Less Than Zero						$2D (3/2)	- - - - -
BMI	Branch if Minus N=1						$2B (3/2)	- - - - -
BNE	Branch if Not Equal to Zero Z=0						$26 (3/2)	- - - - -
BPL	Branch if Plus N=0						$2A (3/2)	- - - - -
BRA	Branch Always						$20 (3/2)	- - - - -
BRN	Branch Never						$21 (3/2)	- - - - -
BSR	Branch to Subroutine						$8D (3/2)	- - - - -
BVC	Branch if Overflow Clear V=0						$28 (3/2)	- - - - -
BVS	Branch if Overflow Set V=1						$29 (3/2)	- - - - -
CLR	Clear			$0F (6/2)	$7F (7/3)	$6F (6+/2+)		- 0 1 0 0
CLRA	Clear A	$4F (2/1)						- 0 1 0 0
CLRB	Clear B	$5F (2/1)						- 0 1 0 0
CMPA	Compare with A		$81 (2/2)	$91 (4/2)	$B1 (5/3)	$A1 (4+/2+)		8 * * * *
CMPB	Compare with B		$C1 (2/2)	$D1 (4/2)	$F1 (5/3)	$E1 (4+/2+)		8 * * * *
CMPD	Compare with AB		$10 83 (5/4)	$10 93 (7/3)	$10 B3 (8/4)	$10 A3 (7+/3+)		- * * * *
CMPS	Compare with S		$11 8C (5/4)	$11 9C (7/3)	$11 BC (8/4)	$11 AC (7+/3+)		- * * * *
CMPU	Compare with U		$11 83 (5/4)	$11 93 (7/3)	$11 B3 (8/4)	$11 A3 (7+/3+)		- * * * *
CMPX	Compare with X		$8C (4/3)	$9C (6/2)	$BC (7/3)	$AC (6+/2+)		- * * * *
CMPY	Compare with Y		$10 8C (5/4)	$10 9C (7/3)	$10 BC (8/4)	$10 AC (7+/3+)		- * * * *
COM	Complement			$03 (6/2)	$73 (7/3)	$63 (6/2)		- * * 0 1
COMA	Complement A	$43 (2/1)						- * * 0 1
COMB	Complement B	$53 (2/1)						- * * 0 1
CWAI	And with CC and Wait		$3C (20/2)					- - - - 7
DAA	Decimal Adjust after Addition	$19 (2/1)						- * * 0 *
DEC	Decrement			$0A (6/2)	$7A (7/3)	$6A (6+/2+)		- * * * -
DECA	Decrement A	$4A (2/1)						- * * * -
DECB	Decrement B	$5A (2/1)						- * * * -
EORA	Exclusive Or A (Xor)		$88 (2/2)	$98 (4/2)	$B8 (5/3)	$A8 (4+/2+)		- * * 0 -
EORB	Exclusive Or B (Xor)		$C8 (2/2)	$D8 (4/2)	$F8 (5/3)	$E8 (4+/2+)		- * * 0 -
EXG	Exchange Register Contents	$1E (8/2)						- - - - -
INC	Increment			$0C (6/2)	$7C (7/3)	$6C (6+/2+)		- * * * -
INCA	Increment A	$4C (2/1)						- * * * -
INCB	Increment B	$5C (2/1)						- * * * -
JMP	Jump			$0E (3/2)	$7E (4/3)	$6E (3+/2+)		- - - - -
JSR	Jump to Subroutine			$9D (7/2)	$BD (8/3)	$AD (7+/2+)		- - - - -
LBCC	Long Branch if Carry Clear C=0						$10 24 (5+/4)	- - - - -
LBCS	Long Branch if Carry Set C=1						$10 25 (5+/4)	- - - - -
LBEQ	Long Branch if Equal Z=1						$10 27 (5+/4)	- - - - -
LBGE	Long Branch if Greater or equal to zero						$10 2C (5+/4)	- - - - -
LBGT	Long Branch if Greater than Zero						$10 2E (5+/4)	- - - - -
LBHI	Long Branch if Higher Z+C=0						$10 22 (5+/4)	- - - - -
LBHS	Long Branch if Higher or Same C=0						$10 24 (5+/4)	- - - - -
LBLE	Long Branch if Less than or Equal to Zero						$10 2F (5+/4)	- - - - -
LBLO	Long Branch if Lower C=1						$10 25 (5+/4)	- - - - -
LBLS	Long Branch if Lower or Same C+Z=1						$10 23 (5+/4)	- - - - -
LBLT	Long Branch if Less Than Zero						$10 2D (5+/4)	- - - - -
LBMI	Long Branch if Minus N=1						$10 2B (5+/4)	- - - - -
LBNE	Long Branch if Not Equal to Zero Z=0						$10 26 (5+/4)	- - - - -
LBPL	Long Branch if Plus N=0						$10 2A (5+/4)	- - - - -
LBRA	Long Branch Always						$16 (5/3)	- - - - -
LBRN	Long Branch Never						$10 21 (5/4)	- - - - -
LBSR	Long Branch to Subroutine						$17 (9/3)	- - - - -
LBVC	Long Branch if Overflow Clear V=0						$10 28 (5+/6)	- - - - -
LBVS	Long Branch if Overflow Set V=1						$10 29 (5+/6)	- - - - -
LDA	Load A		$86 (2/2)	$96 (4/2)	$B6 (5/3)	$A6 (4+/2+)		- * * 0 -
LDB	Load B		$C6 (2/2)	$D6 (4/2)	$F6 (5/3)	$E6 (4+/2+)		- * * 0 -
LDD	Load AB		$CC (3/3)	$DC (5/2)	$FC (6/3)	$EC (5+/2+)		- * * 0 -
LDS	Load S		$10 CE (4/4)	$10 DE (6/3)	$10 FE (7/4)	$10 EE (6+/3+)		- * * 0 -
LDU	Load U		$CE (3/3)	$DE (5/2)	$FE (6/3)	$EE (5+/2+)		- * * 0 -
LDX	Load X		$8E (3/3)	$9E (5/2)	$BE (6/3)	$AE (5+/2+)		- * * 0 -
LDY	Load Y		$10 8E (4/4)	$10 9E (6/3)	$10 BE (7/4)	$10 AE (6+/3+)		- * * 0 -
LEAS	Load Effective Address into S					$32 (4+/2+)		- - - - -
LEAU	Load Effective address into U					$33 (4+/2+)		- - - - -
LEAX	Load Effective Address into X					$30 (4+/2+)		- * * - -
LEAY	Load Effective Address into Y					$31 (4+/2+)		- * * - -
LSL	Logical Shift Left			$08 (6/2)	$78 (7/3)	$68 (6+/2+)		- * * * *
LSLA	Logical Shift Left A	$48 (2/1)						- * * * *
LSLB	Logical Shift Left B	$58 (2/1)						- * * * *
LSR	Logical Shift Right			$04 (6/2)	$74 (7/3)	$64 (6+/2+)		- 0 * - *
LSRA	Logical Shift Right A	$44 (2/1)						- 0 * - *
LSRB	Logical Shift Right B	$54 (2/1)						- 0 * - *
MUL	Multiply A*B – result in AB	$3D (11/1)						- - * - 9
NEG	Negate			$00 (6/2)	$70 (7/3)	$60 (6+/2+)		8 * * * *
NEGA	Negate A	$40 (2/1)						8 * * * *
NEGB	Negate B	$50 (2/1)						8 * * * *
NOP	No Operation	$12 2/1)						- - - - -
ORA	Or A		$8A (2/2)	$9A (4/2)	$BA (5/3)	$AA (4+/2+)		- * * 0 -
ORB	Or B		$CA (2/2)	$DA (4/2)	$FA (5/3)	$EA (4+/2+)		- * * 0 -
ORCC	Or Condition Code		$1A (3/2)					- - - 7 -
PSHS	Push onto S stack (PC US Y X DP B A CC)		$34 (3/2)					- - - - -
PSHU	Push onto U stack (PC US Y X DP B A CC)		$36 (3/2)					- - - - -
PULS	Pull off S stack (PC US Y X DP B A CC)		$35 (3/2)					- - - - -
PULU	Pull off U stack (PC US Y X DP B A CC)		$37 (3/2)					- - - - -
ROL	Rotate Left through Carry			$09 (6/2)	$79 (7/3)	$69 (6+/2+)		- * * * *
ROLA	Rotate Left through Carry A	$49 (2/1)						- * * * *
ROLB	Rotate Left through Carry B	$59 (2/1)						- * * * *
ROR	Rotate Right through Carry			$06 (6/2)	$76 (7/3)	$66 (6+/2+)		- * * - *
RORA	Rotate Right through Carry A	$46 (2/1)						- * * - *
RORB	Rotate Right through Carry B	$56 (2/1)						- * * - *
RTI	Return from Interrupt	$3B (6/15)						- - - - 7
RTS	Return From Subroutine	$39 (5/1)						- - - - -
SBCA	Subtract with Carry from A		$82 (2/2)	$92 (4/2)	$B2 (5/3)	$A2 (4+/2+)		8 * * * *
SBCB	Subtract with Carry from B		$C2 (2/2)	$D2 (4/2)	$F2 (5/3)	$E2 (4+/2+)		8 * * * *
SEX	Sign Extend B into AB	$1D (2/1)						- * * 0 -
STA	Store A			$97 (4/2)	$B7 (5/3)	$A7 (4+/2+)		- * * 0 -
STB	Store B			$D7 (4/2)	$F7 (5/3)	$E7 (4+/2+)		- * * 0 -
STD	Store AB			$DD (5/2)	$FD (6/3)	$ED (5+/2+)		- * * 0 -
STS	Store S			$10 DF (6/3)	$10 FF (7/4)	$10 EF (6+/3+)		- * * 0 -
STU	Store U			$DF (5/2)	$FF (6/3)	$EF (5+/2+)		- * * 0 -
STX	Store X			$9F (5/2)	$BF (6/3)	$AF (5+/2+)		- * * 0 -
STY	Store Y			$10 9F (6/3)	$10 BF (7/4)	$10 AF (6+/3+)		- * * 0 -
SUBA	Subtract from A		$80 (2/2)	$90 (4/2)	$B0 (5/3)	$A0 (4+/2+)		8 * * * *
SUBB	Subtract from B		$C0 (2/2)	$D0 (4/2)	$F0 (5/3)	$E0 (4+/2+)		8 * * * *
SUBD	Subtract from AB		$83 (4/3)	$93 (6/2)	$B3 (7/3)	$A3 (6+/2+)		- * * * *
SWI	Software Interrupt	$3F (19/1)						- - - - -
SWI2	Software Interrupt 2	$10 3F (20/2)						- - - - -
SWI3	Software Interrupt 3	$11 3F (20/2)						- - - - -
SYNC	Syncronise to Ext Event (wait for interrupt)	$13 (2/1)						- - - - -
TFR	Transfer Register to Register		$1F (7/2)					- - - - -
TST	Test			$0D (6/2)	$7D (6/3)	$6D (6+/2+)		- * * 0 -
TSTA	Test A	$4D (2/1)						- * * 0 -
TSTB	Test B	$5D (2/1)						- * * 0 -

Cmd	Meaning	Inherent	Immediate	Direct	Exteded	Indx/Indir	Relative	E F H I N Z V C
ADCD	Add Memory Word plus Carry with Accumulator D		$18 09 (4/4-5)	$10 99 (3/5-7)	$10 B9 (6-8)	$10 A9 (6-7/3)		- - - - * * * *
ADCR	Add Source Register plus Carry to Destination	$10 31(3/4)						- - - - * * * *
ADDE	Add Memory Byte to 8-Bit Accumulator E		$11 8B (3/3)	$11 9B (4-5/3)	$11 BB (3+/5+)	$11 AB (3+/5+)		- - * - * * * *
ADDF	Add Memory Byte to 8-Bit Accumulator F		$11 CB (3/3)	$11DB (5/4)	$11 FB (4/5-6)	$11EB (3+/5+)		
ADDR	Add Source Register to Destination Register	$10 30 (3 /4)						- - - - * * * *