

Bcc Branch on condition cc und (DBcc Test condition, decrement, and branch)

Bcc	Verzweigung, wenn	Synonym	Flag	Vergleich zweier Werte	Bedingung	Beispiel		Test eines Wertes	Beispiel
Branches depending on flag status:						sub.w d0,d1	d1=d1-d0		tst.w d0
BCC	branch on carry clear		!C	if (d1 >= d0)	für d0 >= 0, d1 >= 0	cmp.w d0,d1	d1=d1-d0	if (d0 >= 0)	move.w #1,d0
BCS	branch on carry set		C	if (d1 < d0)	für d0 >= 0, d1 >= 0			if (d0 < 0)	
BNE	branch on not equal		!Z	if (d1 - d0 > 0 d1 - d0 < 0)				if (d0 > 0 d0 < 0)	
BEQ	branch on equal		Z	if (d1 = d0)				if (d0 = 0)	
BVC	branch on overflow clear		!V						
BVS	branch on overflow set		V						
BMI	branch on minus (i.e., negative)		N	if (d1-d0 < 0)				if (d0 < 0)	
BPL	branch on plus (i.e., positive)		!N	if (d1-d0 >= 0)				if (d0 >= 0)	
Branches after unsigned comparison:		0-255, 0-65535, 0-4.294.967.295							
BHI	branch on higher than		!C!Z	if (d1 > d0)	für d0 >= 0, d1 >= 0			if (d0 > 0)	
BHS	BCC branch on higher than or same	BCC	!C	if (d1 >= d0)	für d0 >= 0, d1 >= 0			if (d0 >= 0)	
BLO	BCS branch on less than	BCS	C	if (d1 < d0)	für d0 >= 0, d1 >= 0			if (d0 < 0)	
BLS	branch on lower than or same		C+Z	if (d1 <= d0)	für d0 >= 0, d1 >= 0			if (d0 <= 0)	
BNE	branch on not equal		!Z	if (d1-d0 > 0 d1-d0 < 0)	für d0 >= 0, d1 >= 0			if (d0 > 0 d0 < 0)	
BEQ	branch on equal		Z	if (d1 = d0)	für d0 >= 0, d1 >= 0			if (d0 = 0)	
Branches after signed comparison:		-128 bis 127 ; -32.768 bis 32767 ; -2.147.483.648 bis 2.147.483.647							
BGT	branch on greater than		N.V.!Z + !N!V!Z	if (d1 > d0)				if (d0 > 0)	
BGE	branch on greater than or equal		N.V + !N!V	if (d1 >= d0)				if (d0 >= 0)	
BLT	branch on less than		N!V+!NV	if (d1 < d0)				if (d0 < 0)	
BLE	branch on less than or equal		Z+N!V+!NV	if (d1 <= d0)				if (d0 <= 0)	
BNE	branch on not equal		!Z	if (d1 - d0 > 0 d1 - d0 < 0)				if (d0 > 0 d0 < 0)	
BEQ	branch on equal		Z	if (d1 = d0)				if (d0 = 0)	

Syntax: Bcc label (16-bit displacement) or Bcc.s label (8-bit displacement).

Condition codes:

X Extended

N Negativ

Z Null

V Zahl überschreitet Werteb. unter Berücksicht. des Vorzeichens:

C Zahl passt nicht in Wertebereich

Like carry, is set for arithmetic operations.

z.B. Byte 63 + 65 = 128, d.h. \$80 und damit ist das Vorzeichenbit auf 1 (Carry von Bit 6 nach Bit 7)

z.B. Byte \$FF + 1 passt nicht in ein Byte rein (9.Bit erforderlich)