I2CIDLE

MOVLW 0X1F ; Load Bus Test Value

BANKSEL SSPCON2

ANDWF SSPCON2,W ; Compare 1F to check for 5 busy conditions

BANKSEL STATUS

BTFSS STATUS,Z ;Test Zero Bit

GOTO I2CIDLE ; Z=0 Bus is still busy -repeat

CHECKR\_W ;Z=1 Not Busy

BANKSEL SSPSTAT

BTFSC SSPSTAT,R\_W ; see if SSP is transmitting data

GOTO CHECKR\_W ;R\_W = 1 - Still transmitting data

RETURN ;R\_W = 0 - Transmit done

BAD1

MOVLW 0XFF ;SET RETURN CODE TO -1

BANKSEL SSPCON2

BSF SSPCON2,PEN ;GENERATE A STOP CONDITION

LOOP5

BTFSC SSPCON2,PEN ;IS STOP CONDITION DONE

GOTO LOOP5

RETURN