

MPLAB X IDE v4.05 - GS_buser: default

File Edit View Navigate Source Refactor Production Debug Team Tools Window Help

GS_buser.asm

```

44  slp      call    clear_flag    ;clear flags
45
46  NOP      ;this allows me to set pvi or c before slp
47          ;RAS:3 RCS:4 are inputs 1:5, RCS is input 6
48
49  bcf      INTCN, IOCIF    ;IOC change flag - INTCN, 0
50  sleep
51  nop
52
53  call     delay_5m        ;debounce
54
55  call     pro_inputs      ;process inputs - sets up cvi
56
57  movwf   pvi
58  xorwf   cvi, w           ;compare previous input state with current one
59
60  btfsc   z_bit            ;cvi = pvi?
61  goto    slp             ;Yes - no change in input states
62  call    chkchg
63
64  btfsc   ctn              ;seizure/continue looping or clear
65  goto    mna              ;seizure/continue
66
67  call    delay_20m        ;Clear - Blink period

```

This procedure was taken from the spec.

The programme does not stop at sleep since the flag has not been cleared.

Stopwatch: GS_buser - Dashb... GS_buser.asm... | Stimulus: | Output: | Variables: | Watches: |

Name	Type	Address	Value
PORTA	SFR	0xC	0x0
PORTC	SFR	0xE	0x0
boolean	unsigned char	0x20	SOH; 0x1
temp	unsigned char	0x21	BS; 0x8
cvi	unsigned char	0x28	EOT; 0x4
pvi	unsigned char	0x29	EOT; 0x4
tmpa	unsigned char	0x26	NUL; 0x0
tmpc	unsigned char	0x27	NUL; 0x0
INTCON	SFR	0x8	0x0
IOCAF	SFR	0x33	0x0
IOCAN	SFR	0x32	0x38
IOCAP	SFR	0x31	0x38
IOCCF	SFR	0x39	0x0
IOCCN	SFR	0x38	0x38
IOCCP	SFR	0x37	0xF8

GS_buser (Build, Load, ...) | debugger halted | 53:1 | 9:19 AM 10/12/2017

Positive edge case.

MPLAB X IDE v4.05 - GS_buser: default

File Edit View Navigate Source Refactor Production Debug Team Tools Window Help

GS_buser.asm

```

44  slp      call    clear_flag    ;clear flags
45
46  NOP      ;this allows me to set pvi or c before slp
47          ;RAS:3 RCS:4 are inputs 1:5, RCS is input 6
48
49  bcf      INTCN, IOCIF    ;IOC change flag - INTCN, 0
50  sleep
51  nop
52
53  call     delay_5m        ;debounce
54
55  call     pro_inputs      ;process inputs - sets up cvi
56
57  movwf   pvi
58  xorwf   cvi, w           ;compare previous input state with current one
59
60  btfsc   z_bit            ;cvi = pvi?
61  goto    slp             ;Yes - no change in input states
62  call    chkchg
63
64  btfsc   ctn              ;seizure/continue looping or clear
65  goto    mna              ;seizure/continue
66
67  call    delay_20m        ;Clear - Blink period

```

Stopwatch: GS_buser - Dashb... GS_buser.asm... | Stimulus: | Output: | Variables: | Watches: |

Name	Type	Address	Value
PORTA	SFR	0xC	0x0
PORTC	SFR	0xE	0x0
boolean	unsigned char	0x20	SOH; 0x1
temp	unsigned char	0x21	NUL; 0x0
cvi	unsigned char	0x28	NUL; 0x0
pvi	unsigned char	0x29	EOT; 0x4
tmpa	unsigned char	0x26	NUL; 0x0
tmpc	unsigned char	0x27	NUL; 0x0
INTCON	SFR	0x8	0x0
IOCAF	SFR	0x33	0x20
IOCAN	SFR	0x32	0x38
IOCAP	SFR	0x31	0x38
IOCCF	SFR	0x39	0x0
IOCCN	SFR	0x38	0x38
IOCCP	SFR	0x37	0xF8

GS_buser (Build, Load, ...) | debugger halted | 57:1 | 9:23 AM 10/12/2017

Negative edge case