```
00 Label:
               Step:
                                                                        Codifica per accensione Led
                                   Ps_wlstx = 2
                     Ps_wlcd = 40
                                                                                                     Ps_wletx = 3
                                                                                                        — (T) —
     V2005.B = 0x2
                    V2006.B = 0x28
                                           V2008.B = (V200c.B >> 0x4) + 0xe0
                                                                                                     V200b.B = 0x3
   Ps_wlchh = ((Ps_wl1low ^ Ps_wl1high ^ 68) >> 4) + 224
                                                                                                           (2)
                                                                                                         —(T)—
   V2009.B = ((V2007.B ^ V2008.B ^ 0x44) >> 0x4) + 0xe0
   (1) V2007.B = (V200c.B \& 0xf) + 0xe0 : Ps_wlllow = (Ps_led & 15) + 224
  (2) %V200a.B = ((%V2007.B ^ %V2008.B ^ 0x44) & 0xf) + 0xe0 : Ps_wlchl = ((Ps_wlllow ^ Ps_wllhigh ^ 68) & 15) + 224
01 Label:
                                                                             Gestione seriale
                 Step:
                                                                                                           (1)
                                                                                                         -(T)-
    Ps_stato != 9
                      TON_2e(500)
                                                                                                       Ps_error
                                                                                                                     Errore linea seriale pigna
       ___]>[___
                                                                                                        — (S)-
    %V2003.W != 0x9
                                                                                                        %V202c.0
        E_raz
                                                                                                       Ps_error
                                                                                                                     Errore linea seriale pigna
        —][-
                                                                                                        — (R)—
        %R3.0
                                                                                                        %V202c.0
```

Author: Company:		NUM TOOLS		
Project: 1040_78.mch	TITRE		Date	28-02-2018
Module: PS PIGNA.XLA		%SP40 (00)	Page	1

(1) comin(0x1, %V2050.&, 0xd) : comin(1, Psp_rstx.&, 13)

[T] $TON_2e(0x1f4)$: $TON_2e(500)$

02 Label: Azzeramento variabili in caso di errore seriale Step: Ps_error Ps_cuffia.W = 0 — (T) — %V202c.0 V202a.W = 0x0 $Ps_selax = 0$ — (T)— V202d.B = 0x0 $Ps_pot1 = 0$ — (T) — V202e.B = 0x0 $Ps_pot2 = 0$ —— (Т) — V202f.B = 0x0 $Ps_stato = 0$ — (T)— %V2003.W = 0x0 V2003.W = 0Assegnazioni variabili 03 Label: Step: Ps_stato $Ps_wstx = 2$ $Ps_wetx = 3$ — т — — (T) — %V2002.B = 0x3 V2000.B = 0x2Ps_stato = 1 *V2003.W = 0x1 goto(FINE) —— (Т) —

Author:		NUM TOOLS		
Company:		NOM	1001	5
Project: 1040_78.mch	TITRE		Date	28-02-2018
Module: PS_PIGNA.XLA		%SP40 (02)	Page	2

```
%V2003.W = 1
04 Label:
                   Step: Ps_stato
                                                                           Richiesta valore potenziometri
                                                                                                           Ps_wcodreq = 32
                                                                                                                —(T)—
                                                                                                           %V2001.B = 0x20
                                                                                                   comout(1, Ps_wstx.&, 3)
                                                                                                           ——— (T)—
                                                                                                   comout(0x1, %V2000.&, 0x3)
                                                                                                            Ps_stato = 2
                                                                                                               —(T)-
                                                                                                            %V2003.W = 0x2
                                                                                                             goto(FINE)
                                                                                                               — (T)—
05 Label:
                   Step: Ps_stato
                                     %V2003.W = 2
                                                                                  Calcolo checksum
                                                                                (2)
                                             (1)
                                                                                                                  (3)
   (1) %V205d.B = %V2052.B ^ %V2053.B ^ %V2056.B ^ %V2057.B ^ 0x44 : Psp_cheksum = Psp_r1low ^ Psp_r3low ^ Psp_r3low ^ Psp_r3high ^ 68
   (2) V205e.B = (V205d.B >> 0x4) + 0xe0 : Psp_ch_h = (Psp_cheksum >> 4) + 224
```

Author:
Company:

Project: 1040_78.mch
Module: PS_PIGNA.XLA

NUM TOOLS

Date 28-02-2018

*SP40 (04)
Page 3

(3) V205f.B = (V205d.B & 0xf) + 0xe0 : $Psp_ch_1 = (Psp_cheksum \& 15) + 224$

```
06 Label:
                                     %V2003.W = 2
                                                                                 Verifica checksum
                   Step: Ps_stato
           (1)
                    Psp_ch_1 == Psp_cklow
                                                                                                           Ps_stato = 3
                         __]>[_
                                                                                                               — (T) —
                                                                                                            %V2003.W = 0x3
                   %V205f.B == %V205a.B
                                                                                                           Ps_stato = 1
                                                                                                               — (F)—
                                                                                                           %V2003.W = 0x1
                                                                                                             goto(FINE)
                                                                                                               — (T) —
   (1) %V205e.B == %V205b.B : Psp_ch_h == Psp_ckhigh
07 Label:
                   Step: Ps_stato
                                     %V2003.W = 3
                                                                          Ricavo valore potenziometro assi
                                                                                                                  (1)
                                                                                                                -(T)—
                                                                                                                  (2)
                                                                                                                -(T)-
                                                                                                                  (3)
                                                                                                                -(T)-
                                                                                                                  (4)
                                                                                                                -(T)-
   (1) %V201f.B = %V2053.B - 0xe0 :
                                         Ps_ptlhigh = Psp_rlhigh - 224
   (2) %V201d.B = %V2052.B - 0xe0
                                         Ps_pt1low = Psp_r1low - 224
   (3) %V2020.W = %V201f.W >> 0x4 : Ps_ptlapp = Ps_ptlhigh.W >> 4
   (4) %V202e.B = %V2021.B + %V201d.B : Ps_pot1 = %V2021.B + Ps_pt1low
```

Author:		NUM TOOLS		
Company:		NOM	тоопр	
Project: 1040_78.mch	TITRE		Date	28-02-2018
Module: PS_PIGNA.XLA		%SP40 (06)	Page	4

```
V2003.W = 3
08 Label:
                   Step: Ps_stato
                                                                         Ricavo valore potenziometro mandrino
                                                                                                                  (1)
                                                                                                                -(T)-
                                                                                                                  (2)
                                                                                                                -(T)-
                                                                                                                  (3)
                                                                                                                -(T)-
                                                                                                                  (4)
                                                                                                                -(T)-
                                                                                                            Ps_stato = 4
                                                                                                               — (T) —
                                                                                                            %V2003.W = 0x4
                                                                                                             goto(FINE)
                                                                                                              — (T)—
   (1) %V2024.B = %V2057.B - 0xe0 : Ps_pt2high = Psp_r3high - 224
   (2) %V2022.B = %V2056.B - 0xe0 : Ps_pt2low = Psp_r3low - 224
   (3) %V2025.W = %V2024.W >> 0x4 : Ps_pt2app = Ps_pt2high.W >> 4
   (4) %V202f.B = %V2026.B + %V2022.B : Ps_pot2 = %V2026.B + Ps_pt2low
09 Label:
                                     %V2003.W = 4
                                                                         Richiesta stato tastiera a membrana
                   Step: Ps_stato
                                                                                                           Ps_wcodreq = 33
                                                                                                                — (T) —
                                                                                                           %V2001.B = 0x21
                                                                                                   comout(1, Ps_wstx.&, 3)
                                                                                                    comout(0x1, %V2000.&, 0x3)
                                                                                                            Ps_stato = 5
                                                                                                               — (T)—
                                                                                                            %V2003.W = 0x5
                                                                                                             goto(FINE)
                                                                                                               — (T) –
```

Company:		NUM	1 S	
Project: 1040_78.mch	TITRE		Date	28-02-2018
Module: PS_PIGNA.XLA		%SP40 (08)	Page	5

Author:

```
V2003.W = 5
                                                                                                                                                                                                                                                                                                                                         Calcolo checksum
10 Label:
                                                                       Step: Ps_stato
                                                                                                                                                                                      (1)
                                                                                                                                                                                                                                                                                                                               (2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (3)
             (1) %V205d.B = %V2052.B ^ %V2053.B ^ %V2054.B ^ %V2055.B ^ 0x44 : Psp_cheksum = Psp_r1low ^ Psp_r2low 
             (2) V205e.B = (V205d.B >> 0x4) + 0xe0 : Psp_ch_h = (Psp_cheksum >> 4) + 224
             (3) %V205f.B = (%V205d.B & 0xf) + 0xe0 : Psp_ch_1 = (Psp_cheksum & 15) + 224
11 Label:
                                                                                                                                                      %V2003.W = 5
                                                                                                                                                                                                                                                                                                                                       Verifica checksum
                                                                            Step: Ps_stato
                                                                    Psp_ch_1 == Psp_r3low
                                               (1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                Ps stato = 6
                                                                                         ____]>[___
                                                                                                                                                                                                                                                                                                                                                                                                                                                           — (T) —
                                                                             %V205f.B == %V2056.B
                                                                                                                                                                                                                                                                                                                                                                                                                                                V2003.W = 0x6
                                                                                                                                                                                                                                                                                                                                                                                                                                               Ps_stato = 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                          — (F)—
                                                                                                                                                                                                                                                                                                                                                                                                                                                V2003.W = 0x4
                                                                                                                                                                                                                                                                                                                                                                                                                                                    goto(FINE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           — (T) —
             (1) V205e.B == V2057.B : Psp_ch_h == Psp_r3high
```

Author:
Company:

Project: 1040_78.mch

TITRE

NUM TOOLS

Date 28-02-2018

Page

%SP40 (10)

Module: PS_PIGNA.XLA

bel: Step: Ps_stato %V2003.W = 6	Ricavo stato tasti a membrana	
Psp_rllow.0	Ps_start Start ciclo	
\$V2052.0	%V202a.0	
Psp_rllow.1	Ps_blsbl Sblocco/Blocco utensile	e
] [*V202a.1	
Psp_rllow.2	Ps_f3 F3	
] [*v202a.2	
Psp_rllow.3	Ps_meno Meno	
] [*v202a.3	
Psp_rlhigh.0	Ps_stop Stop	
] [*V202a.4	
Psp_rlhigh.1	Ps_f1 F1	
] [*V202a.5	
bel: Step: Ps_stato %V2003.W = 6	Ricavo stato tasti a membrana	
bel: Step: Ps_stato %V2003.W = 6 Psp_r1high.2	Ricavo stato tasti a membrana Ps_f4 ()	
bel: Step: Ps_stato %V2003.W = 6 Psp_rlhigh.2] [%V2053.2	Ricavo stato tasti a membrana Ps_f4 () %V202a.6	
bel: Step: Ps_stato %V2003.W = 6 Psp_r1high.2 3	Ricavo stato tasti a membrana Ps_f4 () %V202a.6 Ps_cuffia () Sollevamento cuffia ele	ettroma
bel: Step: Ps_stato %V2003.W = 6 Psp_rlhigh.2	Ricavo stato tasti a membrana F4	ettroma
bel: Step: Ps_stato %V2003.W = 6 Psp_rlhigh.2	Ricavo stato tasti a membrana Ps_f4 () %V202a.6 Ps_cuffia () Sollevamento cuffia ele	ettroma
bel: Step: Ps_stato %V2003.W = 6 Psp_rlhigh.2	Ricavo stato tasti a membrana F4	ettroma
bel: Step: Ps_stato %V2003.W = 6 Psp_rlhigh.2	Ps_f4	ettroma
<pre>bel: Step: Ps_stato %V2003.W = 6 Psp_rlhigh.2</pre>	Ps_f4	ettroma:
<pre>bel: Step: Ps_stato %V2003.W = 6 Psp_rlhigh.2</pre>	Ps_f4	ettroman
<pre>bel: Step: Ps_stato %V2003.W = 6 Psp_r1high.2</pre>	Ps_f4	ettroman
bel: Step: Ps_stato %V2003.W = 6 Psp_rlhigh.2	Ps_f4	ettroman

Author:		NUM TOOLS		
Company:		NOM	1001	ПЭ
Project: 1040_78.mch	TITRE		Date	28-02-2018
Module: PS_PIGNA.XLA		%SP40 (12)	Page	7

```
Step: Ps_stato
                                                                                                                 Ps_stato = 7
                                                                                                                *V2003.W = 0x7
                                                                                                                  goto(FINE)
                                                                                                                    — (T) —
                                     %V2003.W = 7
15 Label:
                    Step: Ps_stato
                                                                        Richiesta stato selettori e communatore assi
                                                                                                               Ps_wcodreq = 34
                                                                                                                *V2001.B = 0x22
                                                                                                        comout(1, Ps_wstx.&, 3)
                                                                                                        comout(0x1, %V2000.&, 0x3)
                                                                                                                 Ps_stato = 8
                                                                                                                *V2003.W = 0x8
                                                                                                                  goto(FINE)
                                                                                                                  —— (Т) —
```

%V2003.W = 6

Author:		NUM TOOLS		
Company:		NOM	1001	1 5
Project: 1040_78.mch	TITRE		Date	28-02-2018
Module: PS_PIGNA.XLA		%SP40 (14)	Page	8

14 Label:

```
16 Label:
                   Step: Ps_stato
                                             (1)
                                                                                (2)
                                                                                                                  (3)
                                                                                                                (T)-
   (1) %V205d.B = %V2052.B ^ %V2053.B ^ %V2054.B ^ %V2055.B ^ %V2056.B ^ %V2057.B ^ 0x44
                                                                                        : Psp_cheksum = Psp_rllow ^ Psp_rlhigh ^ Psp_r2low ^ Psp_r2high ^
         Psp_r3low ^ Psp_r3high ^ 68
   (2) V205e.B = (V205d.B >> 0x4) + 0xe0 : Psp_ch_h = (Psp_cheksum >> 4) + 224
   (3) V205f.B = (V205d.B \& 0xf) + 0xe0 : Psp_ch_1 = (Psp_cheksum & 15) + 224
                                                                                 Verifica checksum
17 Label:
                                     V2003.W = 8
                   Step: Ps_stato
           (1)
                   Psp_ch_1 == Psp_r4low
                                                                                                            Ps_stato = 9
                         ___]>[ __
                                                                                                               — (T) –
                   %V205f.B == %V2058.B
                                                                                                            V2003.W = 0x9
                                                                                                            Ps_stato = 7
                                                                                                              — (F)—
                                                                                                            V2003.W = 0x7
                                                                                                             goto(FINE)
                                                                                                               —(T)-
```

Author: NUM TOOLS Company: Project: 1040_78.mch Date 28-02-2018 TITRE

Module: PS_PIGNA.XLA

(1) V205e.B == V2059.B : $Psp_ch_h == Psp_r4high$

%V2003.W = 8

Calcolo checksum

Copyright by...

%SP40 (16)

Page

9

18 Label: %V2003.W = 9 Ricavo stato selettori e commutatori assi Step: Ps_stato (1) -(T)-Psp_r3low.0 Ps_f7 F7 —] [— %V2056.0 %V202b.4 Psp_r3low.1 Ps_f8 F8 —][— — () — %V2056.1 %V202b.5 Psp_r2low.1 Psp_r2low.0 Ps_nomode No mode —] [— —] / [— — () — %V2054.1 %V2054.0 %V202b.7 Psp_r2low.0 Psp_r2low.1 No edit Ps_noedit —][— —][— — () — %V2054.0 %V2054.1 %V202b.6 (1) %V202d.B = %V2052.B - 0xe0 : Ps_selax = Psp_rllow - 224 **19** Label: %V2003.W = 9 Step: Ps_stato Ps stato = 10 ___(T)___ %V2003.W = 0xa goto(FINE) —(T)-

Author:		NUM TOOLS		
Company:		NOM	100	ПО
Project: 1040_78.mch	TITRE		Date	28-02-2018
Module: PS_PIGNA.XLA		%SP40 (18)	Page	10

21 Label: FINE Step:

Author:		NUM		
Company:		HOH	тоопр	'
Project: 1040_78.mch	TITRE		Date	28-02-2018
Module: PS_PIGNA.XLA		%SP40 (20)	Page	11