

# Haiwell PLC SM System Status Bit

SM system status bit is a group of special internal relay of the system, can be used unlimited in the program, each SM has a special function. Do not use the SM which unlisted.

| SM   | Function Declare   | R/W | Power-Off Preserve | Default |
|------|--|-----|--------------------|---------|
| SM0  | On during running, Off during stopping                       | R   | No                 | 0       |
| SM1  | Off during running, On during stopping                       | R   | No                 | 0       |
| SM2  | On during the first scan when PLC starts RUN and then be Off | R   | No                 | 0       |
| SM3  | 10ms clock pulse   | R   | No                 | 0       |
| SM4  | 100ms clock pulse  | R   | No                 | 0       |
| SM5  | 1s clock pulse   | R   | No                 | 0       |
| SM8  | Scan time-out  | R   | No                 | 0       |
| SM9  | PLC switch status  | R   | No                 | 0       |
| SM10 | Run status   | R   | No                 | 0       |
| SM11 | System failure   | R   | No                 | 0       |
| SM12 | Hardware configure table mismatch the module                 | R   | No                 | 0       |
| SM13 | Battery in low voltage, malfunction or no battery            | R   | No                 | 0       |
| SM14 | Divide by zero flag  | R   | No                 | 0       |
| SM15 | Data overflow flag   | R   | No                 | 0       |
| SM16 | COM1 communicate error                                       | R   | No                 | 0       |
| SM17 | COM2 communicate error                                       | R   | No                 | 0       |
| SM18 | COM3 communicate error                                       | R   | No                 | 0       |
| SM19 | COM4 communicate error                                       | R   | No                 | 0       |
| SM20 | COM5 communicate error                                       | R   | No                 | 0       |
| SM25 | HSC0 study mode control, 0-Normal mode 1-study mode          | R/W | No                 | 0       |
| SM26 | HSC0 confirm the study control                               | R/W | No                 | 0       |
| SM27 | HSC0 reset control 0 is automatic reset 1 is not reset       | R/W | No                 | 0       |
| SM30 | HSC0 direction 0-Addition 1-Subtract                         | R   | No                 | 0       |
| SM31 | HSC0 error   | R   | No                 | 0       |
| SM33 | HSC1 study mode control, 0-Normal mode 1-study mode          | R/W | No                 | 0       |
| SM34 | HSC1 confirm the study control                               | R/W | No                 | 0       |
| SM35 | HSC1 reset control 0 is automatic reset 1 is not reset       | R/W | No                 | 0       |
| SM38 | HSC1 direction 0-Addition 1-Subtract                         | R   | No                 | 0       |
| SM39 | HSC1 error   | R   | No                 | 0       |
| SM41 | HSC2 study mode control, 0-Normal mode 1-study mode          | R/W | No                 | 0       |
| SM42 | HSC2 confirm the study control                               | R/W | No                 | 0       |
| SM43 | HSC2 reset control 0 is automatic reset 1 is not reset       | R/W | No                 | 0       |
| SM46 | HSC2 direction 0-Addition 1-Subtract                         | R   | No                 | 0       |
| SM47 | HSC2 error   | R   | No                 | 0       |
| SM49 | HSC3 study mode control, 0-Normal mode 1-study mode          | R/W | No                 | 0       |
| SM50 | HSC3 confirm the study control                               | R/W | No                 | 0       |
| SM51 | HSC3 reset control 0 is automatic reset 1 is not reset       | R/W | No                 | 0       |
| SM54 | HSC3 direction 0-Addition 1-Subtract                         | R   | No                 | 0       |
| SM55 | HSC3 error   | R   | No                 | 0       |
| SM57 | HSC4 study mode control, 0-Normal mode 1-study mode          | R/W | No                 | 0       |

|       |  |     |     |   |
|-------|--|-----|-----|---|
| SM58  | HSC4 confirm the study control                         | R/W | No  | 0 |
| SM59  | HSC4 reset control 0 is automatic reset 1 is not reset | R/W | No  | 0 |
| SM62  | HSC4 direction 0-Addition 1-Subtract                   | R   | No  | 0 |
| SM63  | HSC4 error   | R   | No  | 0 |
| SM65  | HSC5 study mode control, 0-Normal mode 1-study mode    | R/W | No  | 0 |
| SM66  | HSC5 confirm the study control                         | R/W | No  | 0 |
| SM67  | HSC5 reset control 0 is automatic reset 1 is not reset | R/W | No  | 0 |
| SM70  | HSC5 direction 0-Addition 1-Subtract                   | R   | No  | 0 |
| SM71  | HSC5 error   | R   | No  | 0 |
| SM73  | HSC6 study mode control, 0-Normal mode 1-study mode    | R/W | No  | 0 |
| SM74  | HSC6 confirm the study control                         | R/W | No  | 0 |
| SM75  | HSC6 reset control 0 is automatic reset 1 is not reset | R/W | No  | 0 |
| SM78  | HSC6 direction 0-Addition 1-Subtract                   | R   | No  | 0 |
| SM79  | HSC6 error   | R   | No  | 0 |
| SM81  | HSC7 study mode control, 0-Normal mode 1-study mode    | R/W | No  | 0 |
| SM82  | HSC7 confirm the study control                         | R/W | No  | 0 |
| SM83  | HSC7 reset control 0 is automatic reset 1 is not reset | R/W | No  | 0 |
| SM86  | HSC7 direction 0-Addition 1-Subtract                   | R   | No  | 0 |
| SM87  | HSC7 error   | R   | No  | 0 |
| SM93  | PLS0 prohibit the forward pulse                        | R/W | yes | 0 |
| SM94  | PLS0 prohibit the reverse pulse                        | R/W | yes | 0 |
| SM95  | PLS0 prohibit the brake function                       | R/W | yes | 0 |
| SM96  | PLS0 pulse output flag                                 | R   | yes | 0 |
| SM97  | PLS0 pulse output direction flag 0-forward 1-Reverse   | R   | yes | 0 |
| SM98  | PLS0 error flag  | R   | yes | 0 |
| SM99  | PLS0 position mode 0-relatively mode 1-absolutely mode | R/W | yes | 0 |
| SM100 | PLS0 output when position complete                     | R   | yes | 0 |
| SM109 | PLS1 prohibit the forward pulse                        | R/W | yes | 0 |
| SM110 | PLS1 prohibit the reverse pulse                        | R/W | yes | 0 |
| SM111 | PLS1 prohibit the brake function                       | R/W | yes | 0 |
| SM112 | PLS1 pulse output flag                                 | R   | yes | 0 |
| SM113 | PLS1 pulse output direction flag 0-forward 1-Reverse   | R   | yes | 0 |
| SM114 | PLS1 error flag  | R   | yes | 0 |
| SM115 | PLS1 position mode 0-relatively mode 1-absolutely mode | R/W | yes | 0 |
| SM116 | PLS1 output when position complete                     | R   | yes | 0 |
| SM125 | PLS2 prohibit the forward pulse                        | R/W | yes | 0 |
| SM126 | PLS2 prohibit the reverse pulse                        | R/W | yes | 0 |
| SM127 | PLS2 prohibit the brake function                       | R/W | yes | 0 |
| SM128 | PLS2 pulse output flag                                 | R   | yes | 0 |
| SM129 | PLS2 pulse output direction flag 0-forward 1-Reverse   | R   | yes | 0 |
| SM130 | PLS2 error flag  | R   | yes | 0 |
| SM131 | PLS2 position mode 0-relatively mode 1-absolutely mode | R/W | yes | 0 |
| SM132 | PLS2 output when position complete                     | R   | yes | 0 |
| SM141 | PLS3 prohibit the forward pulse                        | R/W | yes | 0 |
| SM142 | PLS3 prohibit the reverse pulse                        | R/W | yes | 0 |
| SM143 | PLS3 prohibit the brake function                       | R/W | yes | 0 |
| SM144 | PLS3 pulse output flag                                 | R   | yes | 0 |

|       |  |     |     |   |
|-------|--|-----|-----|---|
| SM145 | PLS3 pulse output direction flag 0-forward 1-Reverse   | R   | yes | 0 |
| SM146 | PLS3 error flag  | R   | yes | 0 |
| SM147 | PLS3 position mode 0-relatively mode 1-absolutely mode | R/W | yes | 0 |
| SM148 | PLS3 output when position complete                     | R   | yes | 0 |
| SM157 | PLS4 prohibit the forward pulse                        | R/W | yes | 0 |
| SM158 | PLS4 prohibit the reverse pulse                        | R/W | yes | 0 |
| SM159 | PLS4 prohibit the brake function                       | R/W | yes | 0 |
| SM160 | PLS4 pulse output flag                                 | R   | yes | 0 |
| SM161 | PLS4 pulse output direction flag 0-forward 1-Reverse   | R   | yes | 0 |
| SM162 | PLS4 error flag  | R   | yes | 0 |
| SM163 | PLS4 position mode 0-relatively mode 1-absolutely mode | R/W | yes | 0 |
| SM164 | PLS4 output when position complete                     | R   | yes | 0 |
| SM173 | PLS5 prohibit the forward pulse                        | R/W | yes | 0 |
| SM174 | PLS5 prohibit the reverse pulse                        | R/W | yes | 0 |
| SM175 | PLS5 prohibit the brake function                       | R/W | yes | 0 |
| SM176 | PLS5 pulse output flag                                 | R   | yes | 0 |
| SM177 | PLS5 pulse output direction flag 0-forward 1-Reverse   | R   | yes | 0 |
| SM178 | PLS5 error flag  | R   | yes | 0 |
| SM179 | PLS5 position mode 0-relatively mode 1-absolutely mode | R/W | yes | 0 |
| SM180 | PLS5 output when position complete                     | R   | yes | 0 |
| SM189 | PLS6 prohibit the forward pulse                        | R/W | yes | 0 |
| SM190 | PLS6 prohibit the reverse pulse                        | R/W | yes | 0 |
| SM191 | PLS6 prohibit the brake function                       | R/W | yes | 0 |
| SM192 | PLS6 pulse output flag                                 | R   | yes | 0 |
| SM193 | PLS6 pulse output direction flag 0-forward 1-Reverse   | R   | yes | 0 |
| SM194 | PLS6 error flag  | R   | yes | 0 |
| SM195 | PLS6 position mode 0-relatively mode 1-absolutely mode | R/W | yes | 0 |
| SM196 | PLS6 output when position complete                     | R   | yes | 0 |
| SM205 | PLS7 prohibit the forward pulse                        | R/W | yes | 0 |
| SM206 | PLS7 prohibit the reverse pulse                        | R/W | yes | 0 |
| SM207 | PLS7 prohibit the brake function                       | R/W | yes | 0 |
| SM208 | PLS7 pulse output flag                                 | R   | yes | 0 |
| SM209 | PLS7 pulse output direction flag 0-forward 1-Reverse   | R   | yes | 0 |
| SM210 | PLS7 error flag  | R   | yes | 0 |
| SM211 | PLS7 position mode 0-relatively mode 1-absolutely mode | R/W | yes | 0 |
| SM212 | PLS7 output when position complete                     | R   | yes | 0 |

# SV System Register

SV system register is a group of special internal register of the system, can be used unlimited in the program, each SV has a special function. Do not use the SM which unlisted.

| SV   | Function Declare  | R/W | Power-Off Preserve | Default |
|------|---|-----|--------------------|---------|
| SV0  | The present scan time(unit 0.1ms)   | R   | No                 | 0       |
| SV1  | The minimum scan time(unit 0.1ms)   | R   | No                 | 0       |
| SV2  | The maximum scan time(unit 0.1ms)   | R   | No                 | 0       |
| SV3  | System fault code, detail see the system fault code table                                     | R   | No                 | 0       |
| SV4  | COM1 communicate error code   | R   | No                 | 0       |
| SV5  | COM2 communicate error code   | R   | No                 | 0       |
| SV6  | COM3 communicate error code   | R   | No                 | 0       |
| SV7  | COM4 communicate error code   | R   | No                 | 0       |
| SV8  | COM5 communicate error code   | R   | No                 | 0       |
| SV9  | Modbus TCP client port setting, server port fixed as 502                                      | R   | No                 | 0       |
| SV11 | AI input on the CPU module break off alarm every bit express one channel 0-Normal 1-break off | R   | No                 | 0       |
| SV12 | Year  | R   | No                 | 0       |
| SV13 | Month(1-12)   | R   | No                 | 0       |
| SV14 | Day(1-31)   | R   | No                 | 0       |
| SV15 | Hour(0-23)  | R   | No                 | 0       |
| SV16 | Minute(0-59)  | R   | No                 | 0       |
| SV17 | Second(0-59)  | R   | No                 | 0       |
| SV18 | Week(1-7,Monday~Sunday)   | R   | No                 | 0       |
| SV19 | PLC station's name  | R/W | yes                | 0       |
| SV20 | PLC station's name  | R/W | yes                | 0       |
| SV21 | PLC station's name  | R/W | yes                | 0       |
| SV22 | PLC station's name  | R/W | yes                | 0       |
| SV23 | PLC station's name  | R/W | yes                | 0       |
| SV24 | PLC station's name  | R/W | yes                | 0       |
| SV25 | Timer of program scan time-out(unit ms)   | R/W | yes                | 200 ms  |
| SV26 | PLC address 1~254   | R   | yes                | 1       |
| SV27 | Low byte is expansion modules 0~31 High byte is type  | R   | yes                | 0       |
| SV28 | Low byte is CPU's type High byte is CPU's version   | R   | yes                | 0       |
| SV29 | Low byte is first expansion module's code High byte is first expansion module's version       | R   | yes                | 0       |
| SV30 | Low byte is second expansion module's code High byte is second expansion module's version     | R   | yes                | 0       |
| SV31 | Low byte is third expansion module's code High byte is third expansion module's version       | R   | yes                | 0       |
| SV32 | Low byte is fourth expansion module's code High byte is fourth expansion module's version     | R   | yes                | 0       |
| SV33 | Low byte is fifth expansion module's code High byte is fifth expansion module's version       | R   | yes                | 0       |

|      |   |     |     |                       |
|------|---|-----|-----|-----------------------|
| SV34 | Low byte is sixth expansion module's code High byte is sixth expansion module's version   | R   | yes | 0                     |
| SV35 | Low byte is seventh expansion module's code High byte is seventh expansion module's version   | R   | yes | 0                     |
| SV36 | Low byte is eighth expansion module's code High byte is eighth expansion module's version   | R   | yes | 0                     |
| SV37 | Low byte is ninth expansion module's code High byte is ninth expansion module's version   | R   | yes | 0                     |
| SV38 | Low byte is tenth expansion module's code High byte is tenth expansion module's version   | R   | yes | 0                     |
| SV39 | Low byte is eleventh expansion module's code High byte is eleventh expansion module's version   | R   | yes | 0                     |
| SV40 | Low byte is twelfth expansion module's code High byte is twelfth expansion module's version   | R   | yes | 0                     |
| SV41 | Low byte is thirteenth expansion module's code High byte is thirteenth expansion module's version   | R   | yes | 0                     |
| SV42 | Low byte is fourteenth expansion module's code High byte is fourteenth expansion module's version   | R   | yes | 0                     |
| SV43 | Low byte is fifteenth expansion module's code High byte is fifteenth expansion module's version   | R   | yes | 0                     |
| SV44 | COM1 communicate protocol:<br>Low 4 bit of low byte: 0 - N,8, 2 For RTU<br>1 - E,8, 1 For RTU<br>2 - O 8, ,1 For RTU<br>3 - N,7, 2 For ASCII<br>4 - E,7, 1 For ASCII<br>5 - O,7, 1 For ASCII<br>6 - N,8, 1 For RTU(H/N serial support)<br>High 4 bit of low byte: 0 - 2400<br>1 - 4800<br>2 - 9600<br>3 - 19200<br>4 - 38400<br>5 - 57600<br>6 - 115200(H/N serial support) | R/W | yes | 30H,19200, N,8, 2 RTU |
| SV45 | COM1 communicate overtime ,unit ms  | R/W | yes | 200ms                 |
| SV46 | COM2 communicate protocol, the same as COM1   | R/W | yes | 30H                   |
| SV47 | COM2 communicate overtime ,unit ms  | R/W | yes | 200ms                 |
| SV48 | PLC program size  | R   | yes | 0                     |
| SV49 | Low byte of system clock ,unit 16μs   | R   | yes |                       |
| SV50 | High byte of system clock ,unit 16μs  | R   | yes |                       |
| SV54 | COM3 communicate protocol, the same as COM1   | R/W | yes | 30H                   |
| SV55 | COM3 communicate overtime ,unit ms  | R/W | yes | 200ms                 |
| SV56 | COM4 communicate protocol, the same as COM1   | R/W | yes | 30H                   |
| SV57 | COM4 communicate overtime ,unit ms  | R/W | yes | 200ms                 |
| SV58 | COM5 communicate protocol, the same as COM1   | R/W | yes | 30H                   |
| SV59 | COM5 communicate overtime ,unit ms  | R/W | yes | 200ms                 |
| SV60 | HSC0 current segment number   | R   | yes | 0                     |
| SV61 | HSC0 low word of current value  | R   | yes | 0                     |
| SV62 | HSC0 high word of current value   | R   | yes | 0                     |
| SV63 | HSC0 error code   | R   | yes | 0                     |
| SV64 | HSC1 current segment number   | R   | yes | 0                     |
| SV65 | HSC1 low word of current value  | R   | yes | 0                     |
| SV66 | HSC1 high word of current value   | R   | yes | 0                     |

|       |                                       |   |     |   |
|-------|---------------------------------------|---|-----|---|
| SV67  | HSC1 error code                       | R | yes | 0 |
| SV68  | HSC2 current segment number           | R | yes | 0 |
| SV69  | HSC2 low word of current value        | R | yes | 0 |
| SV70  | HSC2 high word of current value       | R | yes | 0 |
| SV71  | HSC2 error code                       | R | yes | 0 |
| SV72  | HSC3 current segment number           | R | yes | 0 |
| SV73  | HSC3 low word of current value        | R | yes | 0 |
| SV74  | HSC3 high word of current value       | R | yes | 0 |
| SV75  | HSC3 error code                       | R | yes | 0 |
| SV76  | HSC4 current segment number           | R | yes | 0 |
| SV77  | HSC4 low word of current value        | R | yes | 0 |
| SV78  | HSC4 high word of current value       | R | yes | 0 |
| SV79  | HSC4 error code                       | R | yes | 0 |
| SV80  | HSC5 current segment number           | R | yes | 0 |
| SV81  | HSC5 low word of current value        | R | yes | 0 |
| SV82  | HSC5 high word of current value       | R | yes | 0 |
| SV83  | HSC5 error code                       | R | yes | 0 |
| SV84  | HSC6 current segment number           | R | yes | 0 |
| SV85  | HSC6 low word of current value        | R | yes | 0 |
| SV86  | HSC6 high word of current value       | R | yes | 0 |
| SV87  | HSC6 error code                       | R | yes | 0 |
| SV88  | HSC7 current segment number           | R | yes | 0 |
| SV89  | HSC7 low word of current value        | R | yes | 0 |
| SV90  | HSC7 high word of current value       | R | yes | 0 |
| SV91  | HSC7 error code                       | R | yes | 0 |
| SV92  | PLS0 current segment number           | R | yes | 0 |
| SV93  | PLS0 low word of pulse output number  | R | yes | 0 |
| SV94  | PLS0 high word of pulse output number | R | yes | 0 |
| SV95  | PLS0 low word of current position     | R | yes | 0 |
| SV96  | PLS0 high word of current position    | R | yes | 0 |
| SV97  | PLS0 error code                       | R | yes | 0 |
| SV98  | PLS1 current segment number           | R | yes | 0 |
| SV99  | PLS1 low word of pulse output number  | R | yes | 0 |
| SV100 | PLS1 high word of pulse output number | R | yes | 0 |
| SV101 | PLS1 low word of current position     | R | yes | 0 |
| SV102 | PLS1 high word of current position    | R | yes | 0 |
| SV103 | PLS1 error code                       | R | yes | 0 |
| SV104 | PLS2 current segment number           | R | yes | 0 |
| SV105 | PLS2 low word of pulse output number  | R | yes | 0 |
| SV106 | PLS2 high word of pulse output number | R | yes | 0 |

|       |   |     |     |   |
|-------|---|-----|-----|---|
| SV107 | PLS2 low word of current position                             | R   | yes | 0 |
| SV108 | PLS2 high word of current position                            | R   | yes | 0 |
| SV109 | PLS2 error code   | R   | yes | 0 |
| SV110 | PLS3 current segment number                                   | R   | yes | 0 |
| SV111 | PLS3 low word of pulse output number                          | R   | yes | 0 |
| SV112 | PLS3 high word of pulse output number                         | R   | yes | 0 |
| SV113 | PLS3 low word of current position                             | R   | yes | 0 |
| SV114 | PLS3 high word of current position                            | R   | yes | 0 |
| SV115 | PLS3 error code   | R   | yes | 0 |
| SV116 | PLS4 current segment number                                   | R   | yes | 0 |
| SV117 | PLS4 low word of pulse output number                          | R   | yes | 0 |
| SV118 | PLS4 high word of pulse output number                         | R   | yes | 0 |
| SV119 | PLS4 low word of current position                             | R   | yes | 0 |
| SV120 | PLS4 high word of current position                            | R   | yes | 0 |
| SV121 | PLS4 error code   | R   | yes | 0 |
| SV122 | PLS5 current segment number                                   | R   | yes | 0 |
| SV123 | PLS5 low word of pulse output number                          | R   | yes | 0 |
| SV124 | PLS5 high word of pulse output number                         | R   | yes | 0 |
| SV125 | PLS5 low word of current position                             | R   | yes | 0 |
| SV126 | PLS5 high word of current position                            | R   | yes | 0 |
| SV127 | PLS5 error code   | R   | yes | 0 |
| SV128 | PLS6 current segment number                                   | R   | yes | 0 |
| SV129 | PLS6 low word of pulse output number                          | R   | yes | 0 |
| SV130 | PLS6 high word of pulse output number                         | R   | yes | 0 |
| SV131 | PLS6 low word of current position                             | R   | yes | 0 |
| SV132 | PLS6 high word of current position                            | R   | yes | 0 |
| SV133 | PLS6 error code   | R   | yes | 0 |
| SV134 | PLS7 current segment number                                   | R   | yes | 0 |
| SV135 | PLS7 low word of pulse output number                          | R   | yes | 0 |
| SV136 | PLS7 high word of pulse output number                         | R   | yes | 0 |
| SV137 | PLS7 low word of current position                             | R   | yes | 0 |
| SV138 | PLS7 high word of current position                            | R   | yes | 0 |
| SV139 | PLS7 error code   | R   | yes | 0 |
| SV140 | When value is -23206 prohibit all output of Y                 | R/W | yes | 0 |
| SV141 | COM1 communicate instruction execute interval unit ms         | R/W | yes | 0 |
| SV142 | The soft address of PLC(1~254)                                | R   | yes | 0 |
| SV143 | The setted address of the external DIP switch                 | R   | yes | 0 |
| SV144 | Low word of serial number                                     | R   | yes | 0 |
| SV145 | High word of serial number                                    | R   | yes | 0 |
| SV146 | Time of the direction output before the pulse output(5~100us) | R/W | yes | 5 |



|       |  |     |     |        |
|-------|--|-----|-----|--------|
| SV151 | Number of locked data                                    | R   | yes | 0      |
| SV152 | IP address,default: 192.168.1.111                        | R/W | yes | 0x0058 |
| SV153 | IP address,default: 192.168.1.111                        | R/W | yes | 0xC0A8 |
| SV154 | Subnet mask,default: 255.255.255.0                       | R/W | yes | 0xFF00 |
| SV155 | Subnet mask,default: 255.255.255.0                       | R/W | yes | 0xFFFF |
| SV156 | PLS0 low word of mechanical original point               | R   | yes | 0      |
| SV157 | PLS0 high word of mechanical original point              | R   | yes | 0      |
| SV158 | PLS0 number of pulses to compensate the reverse interval | R/W | yes | 0      |
| SV159 | PLS0 follow performance parameters,range: 1~100          | R/W | yes | 50     |
| SV160 | PLS1 low word of mechanical original point               | R   | yes | 0      |
| SV161 | PLS1 high word of mechanical original point              | R   | yes | 0      |
| SV162 | PLS1 number of pulses to compensate the reverse interval | R/W | yes | 0      |
| SV163 | PLS1 follow performance parameters,range: 1~100          | R/W | yes | 50     |
| SV164 | PLS2 low word of mechanical original point               | R   | yes | 0      |
| SV165 | PLS2 high word of mechanical original point              | R   | yes | 0      |
| SV166 | PLS2 number of pulses to compensate the reverse interval | R/W | yes | 0      |
| SV167 | PLS2 follow performance parameters,range: 1~100          | R/W | yes | 50     |
| SV168 | PLS3 low word of mechanical original point               | R   | yes | 0      |
| SV169 | PLS3 high word of mechanical original point              | R   | yes | 0      |
| SV170 | PLS3 number of pulses to compensate the reverse interval | R/W | yes | 0      |
| SV171 | PLS3 follow performance parameters,range: 1~100          | R/W | yes | 50     |
| SV172 | PLS4 low word of mechanical original point               | R   | yes | 0      |
| SV173 | PLS4 high word of mechanical original point              | R   | yes | 0      |
| SV174 | PLS4 number of pulses to compensate the reverse interval | R/W | yes | 0      |
| SV175 | PLS4 follow performance parameters,range: 1~100          | R/W | yes | 50     |
| SV176 | PLS5 low word of mechanical original point               | R   | yes | 0      |
| SV177 | PLS5 high word of mechanical original point              | R   | yes | 0      |
| SV178 | PLS5 number of pulses to compensate the reverse interval | R/W | yes | 0      |
| SV179 | PLS5 follow performance parameters,range: 1~100          | R/W | yes | 50     |
| SV180 | PLS6 low word of mechanical original point               | R   | yes | 0      |
| SV181 | PLS6 high word of mechanical original point              | R   | yes | 0      |
| SV182 | PLS6 number of pulses to compensate the reverse interval | R/W | yes | 0      |
| SV183 | PLS6 follow performance parameters,range: 1~100          | R/W | yes | 50     |
| SV184 | PLS7 low word of mechanical original point               | R   | yes | 0      |
| SV185 | PLS7 high word of mechanical original point              | R   | yes | 0      |
| SV186 | PLS7 number of pulses to compensate the reverse interval | R/W | yes | 0      |
| SV187 | PLS7 follow performance parameters,range: 1~100          | R/W | yes | 50     |
| SV801 | HSC0 low word of frequency                               | R   | yes | 0      |
| SV802 | HSC0 high word of frequency                              | R   | yes | 0      |
| SV803 | HSC1 low word of frequency                               | R   | yes | 0      |



|       |   |     |     |        |
|-------|---|-----|-----|--------|
| SV804 | HSC1 high word of frequency   | R   | yes | 0      |
| SV805 | HSC2 low word of frequency  | R   | yes | 0      |
| SV806 | HSC2 high word of frequency   | R   | yes | 0      |
| SV807 | HSC3 low word of frequency  | R   | yes | 0      |
| SV808 | HSC3 high word of frequency   | R   | yes | 0      |
| SV809 | HSC4 low word of frequency  | R   | yes | 0      |
| SV810 | HSC4 high word of frequency   | R   | yes | 0      |
| SV811 | HSC5 low word of frequency  | R   | yes | 0      |
| SV812 | HSC5 high word of frequency   | R   | yes | 0      |
| SV813 | HSC6 low word of frequency  | R   | yes | 0      |
| SV814 | HSC6 high word of frequency   | R   | yes | 0      |
| SV815 | HSC7 low word of frequency  | R   | yes | 0      |
| SV816 | HSC7 high word of frequency   | R   | yes | 0      |
| SV817 | Historical fault code   | R   | yes | 0      |
| SV818 | Historical fault code   | R   | yes | 0      |
| SV819 | Historical fault code   | R   | yes | 0      |
| SV820 | Historical fault code   | R   | yes | 0      |
| SV821 | Historical fault code   | R   | yes | 0      |
| SV822 | Historical fault code   | R   | yes | 0      |
| SV823 | Historical fault code   | R   | yes | 0      |
| SV824 | Historical fault code   | R   | yes | 0      |
| SV825 | Historical fault code   | R   | yes | 0      |
| SV826 | Historical fault code   | R   | yes | 0      |
| SV827 | Historical fault code   | R   | yes | 0      |
| SV828 | Historical fault code   | R   | yes | 0      |
| SV829 | Historical fault code   | R   | yes | 0      |
| SV830 | Historical fault code   | R   | yes | 0      |
| SV831 | Historical fault code   | R   | yes | 0      |
| SV832 | Historical fault code   | R   | yes | 0      |
| SV833 | COM2 Communicate instruction execute interval unit ms               | R/W | yes | 0      |
| SV834 | COM3 Communicate instruction execute interval unit ms               | R/W | yes | 0      |
| SV835 | COM4 Communicate instruction execute interval unit ms               | R/W | yes | 0      |
| SV836 | COM5 Communicate instruction execute interval unit ms               | R/W | yes | 0      |
| SV840 | System status error code  | R   | yes | 0      |
| SV841 | System status error code  | R   | yes | 0      |
| SV842 | CPU firmware version date (low byte for year, high byte for month)  | R   | yes | 0      |
| SV843 | CPU firmware version date (low byte for day, high byte for hour)    | R   | yes | 0      |
| SV844 | FGPA firmware version date (low byte for year, high byte for month) | R   | yes | 0      |
| SV845 | FGPA firmware version date (low byte for day, high byte for hour)   | R   | yes | 0      |
| SV846 | Gateway address:(default:192.168.1.1)                               | R/W | yes | 0x0101 |

|       |   |     |     |        |
|-------|---|-----|-----|--------|
| SV847 | Gateway address:(default:192.168.1.1)   | R/W | yes | 0xC0A8 |
| SV848 | MAC address   | R   | yes | 0      |
| SV849 | MAC address   | R   | yes | 0      |
| SV850 | MAC address   | R   | yes | 0      |
| SV851 | COM1 Communication port timeout exception in receiving characters( in milliseconds) | R/W | yes | 0      |
| SV852 | COM2 Communication port timeout exception in receiving characters( in milliseconds) | R/W | yes | 0      |
| SV853 | COM3 Communication port timeout exception in receiving characters( in milliseconds) | R/W | yes | 0      |
| SV854 | COM4 Communication port timeout exception in receiving characters( in milliseconds) | R/W | yes | 0      |
| SV855 | COM5 Communication port timeout exception in receiving characters( in milliseconds) | R/W | yes | 0      |

# System Interruption Table

Haiwell PLC support 52 system interruption, include pulse output, edge catch, high speed counter and timed interruption.

| Interruption No. | Interruption Type               | Declare   | Priority Level  |
|------------------|---------------------------------|---|---|
| 1                | Pulse output interruption       | PLS0 pulse output start   | High to low<br><br>(the small interruption no. priority the big interruption no.) |
| 2                |                                 | PLS0 pulse output complete  |   |
| 3                |                                 | PLS1 pulse output start   |   |
| 4                |                                 | PLS1 pulse output complete  |   |
| 5                |                                 | PLS2 pulse output start   |   |
| 6                |                                 | PLS2 pulse output complete  |   |
| 7                |                                 | PLS3 pulse output start   |   |
| 8                |                                 | PLS3 pulse output complete  |   |
| 9                |                                 | PLS4 pulse output start   |   |
| 10               |                                 | PLS4 pulse output complete  |   |
| 11               |                                 | PLS5 pulse output start   |   |
| 12               |                                 | PLS5 pulse output complete  |   |
| 13               |                                 | PLS6 pulse output start   |   |
| 14               |                                 | PLS6 pulse output complete  |   |
| 15               |                                 | PLS7 pulse output start   |   |
| 16               |                                 | PLS7 pulse output complete  |   |
| 17               | Edge catch interruption         | X0 rise edge catch  |   |
| 18               |                                 | X1 rise edge catch  |   |
| 19               |                                 | X2 rise edge catch  |   |
| 20               |                                 | X3 rise edge catch  |   |
| 21               |                                 | X4 rise edge catch  |   |
| 22               |                                 | X5 rise edge catch  |   |
| 23               |                                 | X6 rise edge catch  |   |
| 24               |                                 | X7 rise edge catch  |   |
| 25               |                                 | X0 drop edge catch  |   |
| 26               |                                 | X1 drop edge catch  |   |
| 27               |                                 | X2 drop edge catch  |   |
| 28               |                                 | X3 drop edge catch  |   |
| 29               |                                 | X4 drop edge catch  |   |
| 30               |                                 | X5 drop edge catch  |   |
| 31               |                                 | X6 drop edge catch  |   |
| 32               |                                 | X7 drop edge catch  |   |
| 33               | High speed counter interruption | HSC0 current value=preset value(each segment preset be generated) |   |
| 34               |                                 | HSC0 input direction changed                                      |   |
| 35               |                                 | HSC1 current value=preset value(each segment preset be generated) |   |
| 36               |                                 | HSC1 input direction changed                                      |   |
| 37               |                                 | HSC2 current value=preset value(each segment preset be generated) |   |
| 38               |                                 | HSC2 input direction changed                                      |   |
| 39               |                                 | HSC3 current value=preset value(each segment preset be generated) |   |
| 40               |                                 | HSC3 input direction changed                                      |   |

| Interruption No. | Interruption Type | Declare   | Priority Level |                           |
|------------------|-------------------|---|----------------|---------------------------|
| 41               |                   | HSC4 current value=preset value(each segment preset be generated) |                |                           |
| 42               |                   | HSC4 input direction changed                                      |                |                           |
| 43               |                   | HSC5 current value=preset value(each segment preset be generated) |                |                           |
| 44               |                   | HSC5 input direction changed                                      |                |                           |
| 45               |                   | HSC6 current value=preset value(each segment preset be generated) |                |                           |
| 46               |                   | HSC6 input direction changed                                      |                |                           |
| 47               |                   | HSC7 current value=preset value(each segment preset be generated) |                |                           |
| 48               |                   | HSC7 input direction changed                                      |                |                           |
| 49               |                   | Timed interruption  |                | T252 timer reaches target |
| 50               |                   |   |                | T253 timer reaches target |
| 51               |                   |   |                | T254 timer reaches target |
| 52               |                   |   |                | T255 timer reaches target |
|                  |                   |   |                |                           |