NO: TAB00001-EN1/3
DATE: 2023 / 4 / 4
Nippon Pulse Motor Co., Ltd.
Motion Control Division

Errata

"Pulse Control LSI: PCL6115/6125/6145 User's Manual" (DA70152-1/0E1) contains the error described below.

Please confirm the following corrections.

<table>
<tr><th>Page</th><th>Corrected part</th><th>Incorrect</th><th>Correct</th></tr>
<tr><td>83</td><td>4-4-4-1. RMD(PRMD):
Operation mode setting register
<table>
<tr><td>10</td><td>MSMD</td><td>Selects acceleration/deceleration operations.
0: Linear acceleration/deceleration.</td></tr>
</table>
</td><td>1:S-curve acceleration/deceleration.</td><td>1:S-curve acceleration/deceleration. *1
The following will be added outside the table.
*1 When the S-curve section (RDS> 0) in S-curve deceleration is set, and S-curve acceleration / deceleration (RMD.MSMD = 1) is selected, there is a timing that pulse output DOES NOT STOP even if deceleration stop is attempted by turning ON the ALM signal.
Although you instruct to decelerate and stop at this timing, a motor maintains the FL speed (RSPD.AS = RFL) while the operating status remains decelerating (RSTS.CND = 1101b).
The following actions cause the motor not to stop:
Set the S-curve section (RDS> 0) in S-curve deceleration.
Select S-curve acceleration / deceleration (RMD.MSMD = 1).
Immediately after acceleration (while RSPD.AS = RFL), attempt deceleration stop by inputting an ALM signal or using the SDSTP (4Ah) command.
- Countermeasure when the motor does not stop:
While the motor is decelerating (RSTS.CND = 1101b) and the motor is maintaining the FL speed (RSPD.AS = RFL), use the STOP (49h) command to stop immediately.
- Measures to stop:
Take one of the following measures.
1. Use full S-curve deceleration (RDS = 0) with no linear deceleration section.
Do not set the S-curve section (RDS> 0) in S-curve deceleration.
2. Select linear acceleration / deceleration (RMD.MSMD = 0).
Do not select S-curve acceleration / deceleration (RMD.MSMD = 1).
3. Do not use deceleration stop when a signal such as ALM signal is input.
In this case, you can set the S-curve section (RDS> 0) in S-curve deceleration. Also, S-curve acceleration / deceleration (RMD.MSMD = 1) can be selected.
In this case, however, do not use SDSTP (4Ah) command immediately after acceleration (while RSPD.AS = RFL). The time "Ta" immediately after acceleration (while RSPD.AS = RFL) can be calculated by the following formula:
When $RUS > 0$: $Ta[s] = \frac{\left((RUR+1)\times 4\times\sqrt{RUS}\right)}{f_{CLK}}$
When $RUS = 0$: $Ta[s] = \frac{\left((RUR+1)\times 4\times\sqrt{\frac{RFH-RFL}{2}}\right)}{f_{CLK}}$</td></tr>
</table>

<table>
<tr><th>Page</th><th>Corrected part</th><th>Incorrect</th><th>Correct</th></tr>
<tr><td>89</td><td>4.4.4.2 RENV1: Environment setting 1 register
<table><tr><td>30</td><td>PCSM</td><td>1 :</td></tr></table></td><td>Incorrect:
<table><tr><th>RENV1.PCSM</th><th>RMD.MPCS</th><th>PCSn terminal</th><th>CSTA terminal</th></tr><tr><td>0</td><td>0</td><td>General-purpose input</td><td>Simultaneous start</td></tr><tr><td>0</td><td>1</td><td>Start pulse counts</td><td>Simultaneous start</td></tr><tr><td>1</td><td>0</td><td>Start own-axis</td><td>Shared input</td></tr></table>Correct:
<table><tr><th>RENV1.PCSM</th><th>RMD.MPCS</th><th>PCSn terminal</th><th>CSTA terminal</th></tr><tr><td>0</td><td>0</td><td>General-purpose input</td><td>Simultaneous start</td></tr><tr><td>0</td><td>1</td><td>Start pulse counts</td><td>Simultaneous start</td></tr><tr><td>1</td><td>0</td><td>Start own-axis</td><td>Shared input</td></tr><tr><td>1</td><td>1</td><td>Start own-axis</td><td>Shared input</td></tr></table></td><td></td></tr>
<tr><td>104</td><td>4-4-7-1. RSTS:
Obtaining extension status register
<table><tr><td>8</td><td>SPCS</td><td>1 :</td></tr></table></td><td>“RMD.PCSL = 0”.
“RMD.PCSL = 1”.</td><td>“RENV1.PCSL = 0”.
“RENV1.PCSL = 1”.</td></tr>
<tr><td>104</td><td>4-4-7-1. RSTS:
Obtaining extension status register
<table><tr><td>9</td><td>SERC</td><td>1 :</td></tr></table></td><td>“RMD.ERCL = 0”.
“RMD.ERCL = 1”.</td><td>“RENV1.ERCL = 0”.
“RENV1.ERCL = 1”.</td></tr>
<tr><td>104</td><td>4-4-7-1. RSTS:
Obtaining extension status register
<table><tr><td>11</td><td>SPDR</td><td>1 :</td></tr></table></td><td>“RMD.DRL = 0”.
“RMD.DRL = 1”.</td><td>“RENV1.DRL = 0”.
“RENV1.DRL = 1”.</td></tr>
<tr><td>105</td><td>4-4-7-1. RSTS:
Obtaining extension status register
<table><tr><td>12</td><td>SMDR</td><td>1 :</td></tr></table></td><td>“RMD.DRL = 0”.
“RMD.DRL = 1”.</td><td>“RENV1.DRL = 0”.
“RENV1.DRL = 1”.</td></tr>
<tr><td>105</td><td>4-4-7-1. RSTS:
Obtaining extension status register
<table><tr><td>14</td><td>SDIN</td><td>1 :</td></tr></table></td><td>“RMD.SDL = 0”.
“RMD.SDL = 1”.</td><td>“RENV1.SDL = 0”.
“RENV1.SDL = 1”.</td></tr>
<tr><td>105</td><td>4-4-7-1. RSTS:
Obtaining extension status register
<table><tr><td>15</td><td>SINP</td><td>1 :</td></tr></table></td><td>“RMD.INPL = 0”.
“RMD.INPL = 1”.</td><td>“RENV1.INPL = 0”.
“RENV1.INPL = 1”.</td></tr>
</table>

Page	Corrected part	Incorrect	Correct
128	6.2.1.3 RUR(PRUR): Acceleration rate setting register 3. Partial S-curve acceleration with linear section (RMD.MSMD = 1, RUS> 0)	Incorrect: $RUR=\frac{\text{Reference clock frequency[Hz]} \times \text{Acceleration time[s]}}{(RFH - RFL+2\times RUS)\times 2} - 1 - 1$ Correct: $RUR=\frac{\text{Reference clock frequency[Hz]} \times \text{Acceleration time[s]}}{(RFH - RFL+2\times RUS)\times 2} - 1$	
186	7-14. ID Monitor	The LSIs in this series have ID codes in order to distinguish them from other LSI products.	This ID monitor is a function to distinguish these LSIs from the previous LSIs that only have parallel-bus interfaces. When you use a serial bus interface, this ID code cannot be read out.

- End of document –

Revision

Revision	Date	Contents
1st	April 2, 2019	New document.
2nd	-	-
3rd	-	-
4th	September 14, 2021	4-4-4-1. RMD(PRMD), 4-4-7-1. RSTS, and 7-14. ID Monitor are corrected.
4thE1	April 4, 2023	4.4.4.2 RENV1: Environment setting 1 register PCSM The fourth line of the table is added. 6.2.1.3 RUR(PRUR): Acceleration rate setting register 3. The formula is corrected.