For the V850 series microcontrollers, the following further notes about the function of the timer/event counter register is released.

1. **Notification**

   (1) **TMPn counter read buffer register (TPnCNT)**

   - If TPnCNT register is read when the TPnCE bit = 0, 0000H is read.
   - If TPnCNT register is read when the TPnCE bit = 1, the count value of the 16-bit timer can be read.

   The count value of the 16-bit counter is different by operation mode as follows.

   - **External event count mode**
     - The 16-bit counter is set to 0000H at the timing when the TPnCE bit changes from 0 to 1.
     - After that, the counter counts up from 0001H to 0002H, 0003H, and so on, each time a valid edge of an external event count input is detected.

   - **Other modes**
     - The 16-bit counter starts counting from the default value FFFFH.
     - It counts up from FFFFH to 0000H, 0001H, 0002H, 0003H, and so on.
(2) TMQn counter read buffer register (TQnCNT)

If TQnCNT register is read when the TQnCE bit = 0, 0000H is read.
If TQnCNT register is read when the TQnCE bit = 1, the count value of the 16-bit timer can be read.

The count value of the 16-bit counter is different by operation mode as follows.

- External event count mode
  The 16-bit counter is set to 0000H at the timing when the TQnCE bit changes from 0 to 1.
  After that, the counter counts up from 0001H to 0002H, 0003H, and so on, each time a valid edge of an external event count input is detected.

- Other modes
  The 16-bit counter starts counting from the default value FFFFH.
  It counts up from FFFFH to 0000H, 0001H, 0002H, 0003H, and so on.

2. Affected Products

<table>
<thead>
<tr>
<th>Products series</th>
<th>TMP</th>
<th>TMQ</th>
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</thead>
<tbody>
<tr>
<td>V850ES/SG1 series</td>
<td>o</td>
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<tr>
<td>V850ES/SG2 series</td>
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<tr>
<td>V850ES/SJ2 series</td>
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○ : provided, ● : non-provided