TESTING / INSPECTION REPORT

REPORT NO : VT-180712-1R

COMPANY : TechNexion Ltd.
ADDRESS : 16F-5, No. 736, Zhongzheng Road, ZhongHe District, 23511,
           New Taipei City, Taiwan
TEL     : 886-2-8227-3585
FAX     : 886-2-8227-3590
SPECIMEN : TWP1560-BSW series
           TN140_TEP5-BSW --- TEP5-BSW-N3710
           Power Expansion L112--- TXR-P1-12V-LAN1
           I/O Expansion XS21--- TXR-I2-S2-G8

DATE OF RECEIVED : 2018/06/27
DATE OF TESTED  : 2018/06/27

TEST / INSPECTION ITEMS : Vibration Test

REMARKS :
- The laboratory is accredited by ISO/IEC 17025 General Requirements for the
  Competence of Calibration and Testing Laboratory.
- The results only apply to the device under test.
- This report is update to "VT-180712-1" document.
- This report is 8 pages, and no part of it may be abstracted or reproduced.

Test Engineer :

Approval Signatory :  

Laboratory Head :  

--- KING DESIGN INDUSTRIAL CO., LTD. ---
--- Reliability & Communication Testing Instruments ---
VIBRATION LABORATORY
http: //www.kdi.tw
E-mail: service@kdi.tw
TESTING / INSPECTION REPORT

TESTING EQUIPMENT:

2. Controller : DACTRON LASER USB, S/N: 12448370

TEST ENVIRONMENT:

Temperature : 25°C (25±10°C)
Relative Humidity : 61%RH (50±25% RH)

SPECIMEN:

No1
Model/(S/N) : TWP1560-BSW series
TN140_TEP5-BSW --- TEP5-BSW-N3710
Power Expansion L112--- TXR-P1-12V-LAN1
I/O Expansion XS21--- TXR-I2-S2-G8

Quantity : 1 unit
TESTING / INSPECTION REPORT

TEST SPECIFICATION:
As per applicant’s requirement---

Random Vibration test (Operating)
Frequency : 5 Hz to 500 Hz

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>PSD (g)²/Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0.00202068</td>
</tr>
<tr>
<td>500</td>
<td>0.00202068</td>
</tr>
</tbody>
</table>

Test Axis : X, Y, Z axis
Acceleration : 1 grms
Test Time : 60 min / axis
Total Test Time : 180 min

TEST RESULT:

<table>
<thead>
<tr>
<th>Describe</th>
<th>PASS</th>
<th>FAIL</th>
<th>Non-Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function judgment</td>
<td>√</td>
<td>----</td>
<td>---</td>
</tr>
<tr>
<td>Appearance check</td>
<td>√</td>
<td>----</td>
<td>---</td>
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</tbody>
</table>
## Vibration testing photos

<table>
<thead>
<tr>
<th>Testing equipment</th>
<th>Z axis</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Z axis" /></td>
<td></td>
</tr>
<tr>
<td><img src="image2.jpg" alt="X axis" /></td>
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</tr>
<tr>
<td><img src="image3.jpg" alt="Y axis" /></td>
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</tbody>
</table>

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**Reliability & Communication Testing Instruments**

KING DESIGN INDUSTRIAL CO., LTD.

VIBRATION LABORATORY

4F, NO. 3, Lane 270, Pei Shen Road Sec. 3,
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E-mail: service@kdi.tw

http://www.kdi.tw

http://www.vibration.com.tw

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TELECOMS / VIBRATION / SHOCK INSTRUMENTS

REPORT NO: VT-180712-1R

Page 4 of 8
Testing photos

After test-1
X axis -

Test Type: Random
Run Folder: \RunFolder Jun 27, 2018 10-34-00

Level: 100 %

Control RMS: 1.003413 gn Full Level Elapsed Time: 01:00:00 Lines: 400 Frame Time: 0.800000 Seconds
Demand RMS: 1.000664 gn Remaining Time: 00:00:00 DOF: 154 dF: 1.250000 Hz
Y axis
Test Type: Random  Run Folder: \RunFolder Jun 27, 2018 09-14-31

Level: 100 %
Control RMS: 1.003474 gn  Full Level Elapsed Time: 01:00:00  Lines: 400  Frame Time: 0.800000 Seconds
Demand RMS: 1.000664 gn  Remaining Time: 00:00:00  DOF: 154  dF: 1.250000 Hz
Z axis

Test Type: Random  Run Folder: \RunFolder Jun 27, 2018 12-07-24

<table>
<thead>
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<th>5.00</th>
<th>10.00</th>
<th>20.00</th>
<th>50.00</th>
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</thead>
<tbody>
<tr>
<td>(gn^2/Hz)</td>
<td>1.2000</td>
<td>0.1000</td>
<td>0.0100</td>
<td>0.0010</td>
</tr>
<tr>
<td>Demand RMS</td>
<td>1.000664 gn</td>
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<tr>
<td>Control RMS</td>
<td>1.032930 gn</td>
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<tr>
<td>Elapsed Time</td>
<td>01:00:00</td>
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<tr>
<td>Lines</td>
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<tr>
<td>Frame Time</td>
<td>0.800000 Seconds</td>
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<tr>
<td>DOF</td>
<td>154</td>
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</tr>
<tr>
<td>dF</td>
<td>1.250000 Hz</td>
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</tr>
</tbody>
</table>

Level: 100 %

- END -