



Test Certificate

We hereby verify that the under mentioned product complied with the requirements in the UN Manual of Tests and Criteria, Part III, Subsection 38.3, sixth Edition and US DOT 49CFR 173-185.

Report reference number. : **HCT-BA-2101-RE005-R1**

Applicant..... : **SAMSUNG SDI CO., LTD**
150-20, GONGSE-RO GIHEUNG-GU, YONGIN-SI, GYEONGGI-DO,
KOREA

Manufacturer : **SAMSUNG SDI CO., LTD**
150-20 Gonse-ro, Giheung-gu, Yongin-si, Gyeonggi-do, 17084, KOREA
Contact : Choi seung lim Telephone : 070-7125-0686
E-mail : SI74.choi@samsung.com Website : <http://www.samsungsdi.com>

Name of product..... : **Rechargeable Li-ion Battery Module**

Model / type designation : **9P28S Module**

Ratings..... : **102.2 V, 36 500 mAh, 3.740 kWh**

Weight : **Approx. 20.4 kg**

Test standard..... : **ST/SG/AC.10/11/Rev.6/Amend.1**

Test laboratory : **HCT Co., Ltd.**
74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do,
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Test items and Results : **T.1, T.2, T.3, T.4, T.5** **Pass**

Date of issue : **May 26, 2021**



Jae-Ho Jang

Technical Manager, Energy Team

HCT CO., LTD.





Test Results

No.	Test items	Criteria	Results
1	Test T.1: Altitude simulation	<ul style="list-style-type: none">- There is no leakage, no venting, no disassembly, no rupture and no fire- The open circuit voltage of each test cell or battery after testing is not less than 90 % of its voltage immediately prior to this procedure	Pass
2	Test T.2: Thermal test	<ul style="list-style-type: none">- There is no leakage, no venting, no disassembly, no rupture and no fire- The open circuit voltage of each test cell or battery after testing is not less than 90 % of its voltage immediately prior to this procedure	Pass
3	Test T.3: Vibration	<ul style="list-style-type: none">- There is no leakage, no venting, no disassembly, no rupture and no fire during the test and after the test- The open circuit voltage of each test cell or battery directly after testing in its third perpendicular mounting position is not less than 90 % of its voltage immediately prior to this procedure	Pass
4	Test T.4: Shock	<ul style="list-style-type: none">- There is no leakage, no venting, no disassembly, no rupture and no fire- The open circuit voltage of each test cell or battery after testing is not less than 90 % of its voltage immediately prior to this procedure	Pass
5	Test T.5: External short circuit	<ul style="list-style-type: none">- Their external temperature does not exceed 170 °C and there is no disassembly, no rupture and no fire during the test and within six hours after the test	Pass
6	Package drop (1.2 m)	<ul style="list-style-type: none">- Without damage to cells or batteries contained therein;- Without shifting of the contents so as to allow battery to battery (or cell to cell) contact;- Without release of contents	Pass