



PayCert
48 rue Montmartre
75002 Paris
France

Paris, 24/04/2023

Mr Yongsoo LEE
Bluebird Inc.
3F, 115, Irwon-ro, Gangnam-gu,
Seoul
Republic of Korea

CEN TS 16794 Compliance Certificate - PCD

A smart Ticketing Alliance certification program

Certificate Number: CNAPC/PCD-00036
Product/System name: EF551 (commercial identification)
Compliant with : CEN/TS 16794-1:2017
Operational temp. range : Class A (Ambient)

Dear M. LEE,

The Certification Body PayCert has received a request, submitted by Bluebird Inc., your company, for the Certification of the PCD product EF551 (PCD Hardware version: REV0.2, PCD Software version: v2.9.0), hereafter referred to as the Product and identified above as "EF551".

In connection with your request, we have received your Implementation Conformance Statement (ICS), referred to as PAY.BLU.PCD.CEN16794.2017.2023-004 dated 12/04/2023 and we have assessed your Test Report(s) (ref. IC.E.RE.2212.035 V1.0 (Analog), IC.E.RE.2212.036 V1.0 (Digital)), which was generated by ICUBE, following the Test Plan "CEN/TS 16794-2:2017".

Based on these elements, as indicated in PayCert's Certification Report (ref. CER/EVR/PIC/2023-058 v1.0.0) the Certification Body has found reasonable evidence that the submitted samples of the Product complies to the CEN/TS 16794-1:2017 Public transport - Communication between contactless readers and fare media.

The Certification Body hereby grants the Product Certification of compliance with the requirements stated by the CEN/TS 16794-1:2017 standard and will include your Product in the certified products list, published on PayCert website (www.cna-paycert-certification.com).



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Please note that the present Certification is subject to the following terms and conditions as listed hereafter :

i) The present Certification is granted on the basis of the Smart Ticketing Alliance Certification Policy and therefore is valid as of today and will expire on the 24th of April 2030

ii) If the Product is changed, Bluebird Inc. must notify the Certification Body of this fact in writing. Any change in the Product that may generate a different behaviour with respect to the CEN/TS 16794-1:2017 standard or a difference in the Product Implementation Conformance Statement will be considered a major modification subject to a new evaluation in order to maintain the present Certification.

iii) The present Certification granted to Bluebird Inc. for the above referenced Product is non-transferable to any other vendor.

The Certification Body has the right to terminate or revoke the Certification should any of the aforementioned terms and conditions be not respected.

Bluebird Inc., Certificate Number: CNAPC/PCD-00036

Name: Laurence Masson

Title: Development Manager



Certification / n°5-0563
Portée disponible sur
www.cofrac.fr



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a. PCD Product Description

[PCD1] Administrative data

[PCD1.1] (*) Brand name: EF551

[PCD1.2] (*) Trade name: EF551

[PCD1.3a] (*) PCD Hardware version: REV0.2

[PCD1.3b] (*) PCD Software version: v2.9.0

[PCD1.4] (*) Reference of the contactless reader or antenna module: PN5120AHN

[PCD1.4a] (*) Hardware version of the contactless reader or antenna module: C2

[PCD1.4b] (*) Software version of the contactless reader or antenna module: 2.0

[PCD1.5] (*) EMVCo Approval number (if applicable): Not applicable

The PCD is based on a STA certified PCD (*): No

If yes STA PCD certificate number (*): -

If yes rationale to justify the delta-certification (*): -

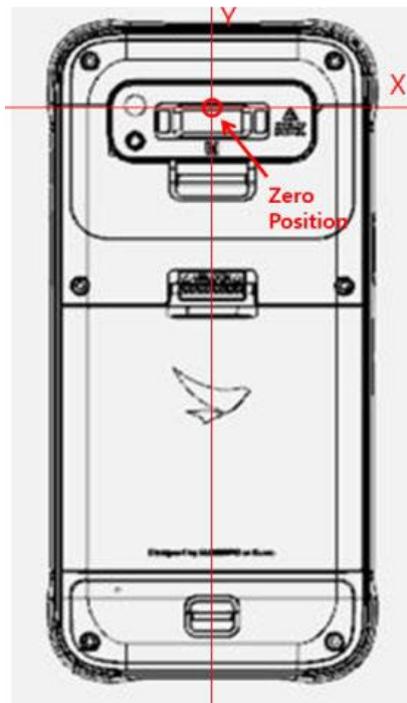
b. PCD General Technical Characteristics

[PCD2.1] (*) PT Reader Type: IFM Reader (Full range A and B)

[PCD2.2] (*) Transaction supported when more than one PICC in the field: No

[PCD2.3] (*) Operational temperature range supported: Class A (Ambient)

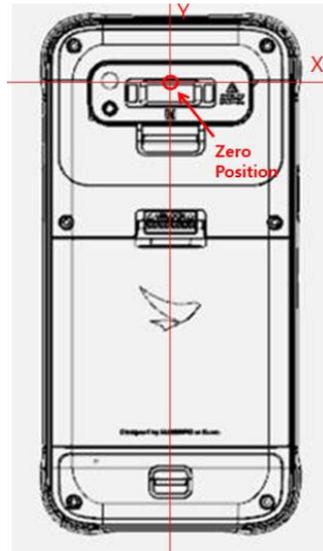
[PCD2.7] (*) Reference of the PCD Zero Point – Range A (target ID marked on sample or photo or diagram)





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[PCD2.11] (*) Reference of the PCD Zero Point – Range B (target ID marked on sample or photo or diagram)



Same as Range A

c. PCD Supported Options

[PCD3] Protocol characteristics

[PCD3.1] (*) Other supported communication signal interface(s) or protocol(s): Type A, TypeB, Type B'

[PCD4] Type A

[PCD4.1] (*) PCD -> PICC bit rates supported: fc/128 (~106 kbit/s)

Other:

[PCD4.2] (*) PICC -> PCD bit rates supported: fc/128 (~106 kbit/s)

Other:

[PCD5] Type B

[PCD5.1] (*) PCD -> PICC bit rates supported: fc/128 (~106 kbit/s)

Other:

[PCD5.2] (*) PICC -> PCD bit rates supported: fc/128 (~106 kbit/s)

Other:

d. PCD Test Parameters

[PCD6] Test parameters

[PCD6.2c] (*) PCD internal output buffer size (used for Maximum size of UT_APDU): 256 bytes

[PCD6.2d] (*) PCD internal input buffer size (used for Maximum size of response UT_APDU): 256 bytes