

Date: October 3, 2018



Yasufumi Yatsuzuka

Sharp Corporation  
1 Takumi-cho  
Sakai-ku  
Sakai City  
Osaka 590-8522  
JAPAN

**Re:** *EMVCo Letter of Approval – EMV Contactless Level 1 Mobile Product*

**Approval Number:** MTA\_LOA\_SHCO\_01405  
**Approval Date:** October 3, 2018  
**EMVCo Website Publication Date:** February 1, 2019  
**Approval Expiration Date:** October 3, 2021

Product Provider Name:	Sharp Corporation
Registration Number:	SHCO.V 14 0051
Commercial Name:	801SH
Product Name:	18ESH30
Product Version:	V1
Type Allocation Code (TAC) or product identifier for testing sample:	00440111
Type Allocation Code (TAC) or product identifier for production <sup>1</sup> :	35778209
Implementation Conformance Statement:	MTA_ICS_SHCO_01405_60
EMV Specification:	Version 2.6
EMV Specification Bulletins:	N/A
Contactless Level 1 Analog Test Cases:	Version 2.6b
Contactless Level 1 Digital Test Cases:	Version 2.6b
Contactless Level 1 Performance Test Cases:	Version 1.2
Contactless Level 1 Interoperability Test Requirements:	Version 2.0
Contactless Level 1 Test Cases Bulletins:	N/A

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<sup>1</sup> The value of the TAC or the product identifier for production is for information purposes only. Only the TAC value or the product identifier of the testing sample is checked by EMVCo.

Contactless Communication Protocol:  Type A  Type B

Execution Environment:  UICC<sup>2</sup> slot 1  UICC<sup>2</sup> slot 2  
 eSE  HCE

Mobile Product Operating System Name and Version: Android Version 9.0

NFC Controller Name and Version: CXD2248GG Version 023100

NFC Controller Firmware Name and Version: D2244 Version 1.14.0

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<sup>2</sup> The product was tested with a UICC provided by EMVCo. EMVCo does not guarantee that the product will function with other UICCs or in combination with other products.

Dear Yasufumi Yatsuzuka,

EMVCo, LLC ("EMVCo"), a Delaware limited liability company, has received your request for EMV contactless Level 1 mobile product approval for the above referenced product. In connection with your Request for Approval dated September 27, 2018 attached hereto as Attachment B, we have reviewed all reports submitted.

As a result, EMVCo has found reasonable evidence that the submitted samples passed EMVCo applicable analog and digital tests covering Book D – EMV Contactless Communication Protocol Specification and other EMVCo requirements.

For a more detailed listing of the features supported by the product please review the Implementation Conformance Statement attached hereto as Attachment C.

EMVCo hereby (a) grants your EMVCo mobile type approval, based on the requirements stated in Book D – EMV Contactless Communication Protocol Specification and other EMVCo requirements, and (b) agrees to include your EMV mobile product in EMVCo's list of approved products. EMVCo mobile type approval does not extend to portions or components of a card or application that are not defined by Book D – EMV Contactless Communication Protocol Specification. EMVCo's grant to your EMV mobile product is subject to and specifically incorporates (i) the General Terms and Conditions to the Letter of Approval enclosed as Exhibit A, and (ii) the Specific Terms and Conditions to the Letter of Approval attached hereto as Attachment A. Because EMVCo's grant is subject to such limitations, including certain events of termination, you and any third parties should confirm that such approval is current and has not been terminated by referring to the EMVCo list of approved products.

This Letter of Approval generally applies to the product only as tested. It can continue to apply to the product if it undergoes a minor change, as described in the Administrative Process document. If the product undergoes more than one minor change, or undergoes a change that is not categorized as a minor change, you must provide notice to EMVCo briefly describing such change(s) at least thirty (30) days prior to implementation of the applicable change. EMVCo may revoke this Letter of Approval if it no longer applies to the product, in which case additional testing would be required to reissue a Letter of Approval for the product

In addition, this Letter of Approval may be revoked at any time by EMVCo upon notice.

This product will appear in the public list of approved products on or after the EMVCo Website Publication Date indicated above, as required by you in your "Request for Approval (and Request for Publication)". If the date changes, it is the product provider's responsibility to promptly notify EMVCo CAWG Secretariat as early as possible before the EMVCo Website Publication Date.

**This Letter of Approval is valid while the approval number is posted on the EMVCo website.**

EMVCo, LLC

By:

Name: Keith Fojtik

Title: EMVCo Card & Mobile Type Approval Chair

# **Attachment A**

## **Specific Terms and Conditions to Letter of Approval**

During testing, the following issues were identified. Restrictions identified must be disclosed to customers (issuers or other product providers to whom the Product Provider intends to sell the product).

### **Restrictions, if any:**

### **Comments, if any:**

HCE Execution environment has been tested with kernels C2, C3, C4, C5