



12 October 2017

ID Tech
Attn: Larry Meyers
10721 Walker Street,
Cypress California
90630 USA

Approval Number: 300.FIME.13.IDTECH.UnipayIII.171012-R

RE: Expresspay 3.0 Reader Certification
Product Name: UniPay III
Firmware Version: Amex ExpressPay 3.0, v1.00

Dear Larry,

We are pleased to inform you that American Express has certified the UniPay III for Expresspay 3.0 Reader Certification using Firmware Version Amex ExpressPay 3.0, v1.00 based on the information provided below. This Expresspay 3.0 certification is valid for three years from the date of issuance.

The certification process addressed the acceptance of American Express Proximity Device capabilities.

Because the certification process cannot possibly test for every scenario, the discovery of any subsequent bugs or issues may require the correction and recertification of your software, firmware, and/or hardware.

Sincerely,

A handwritten signature in black ink, appearing to read "JL Giacometto".

Jose Luis Giacometto
GNB- Optimization
American Express

If you have question or for additional certification request please send an email to axp.contactless.terminal.support@aexp.com

**Expresspay 3.0 Contactless Reader
Implementation Conformance Statement**

Confidential and Trade Secret Materials

This document contains sensitive, confidential and trade secret information and may not be disclosed to third parties without the prior written consent of American Express Travel Related Services Company, Inc.

The policies, procedures, and rules in this manual are subject to change from time to time by American Express Global Network Services.

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Summary of Changes

Date	Version	Modification
23-Dec-12	1.0a	Baseline document
01-Feb-13	1.0b	Removed options related to Kernel-C, Rules on different options are removed to have one ICS for many configurations.
18-Feb-13	1.0c	Added options for TVR availability and terminal type in PDOL
12-Mar-13	1.0d	Added new options for removal time, UN generation method, Display capability of reader
05-Dec-13	1.1	Tidy-up of document including modifications related to condition support. Addition of modular approval and configurable kernel content.
18-Dec-13	1.2	Minor modifications following internal feedback.
28-Apr-15	1.3	Final draft for release
30-Apr-15	1.3.1	Reformatted Summary of Changes

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1.0 Using this document

1.1. Purpose of the Document

The purpose of this document is to capture the implementer specific options for contactless reader's submitted for Expresspay contactless reader functional type approval. Readers are submitted for type approval so as to prove compliance with the functional requirements as defined in [SPEC].

1.2. Out of Scope

The following are considered out of scope of this document:

- Details of functional and technical requirements as specified in [SPEC].
- Details of the certification process as specified in [PROC].

1.3. Audience

The document is intended to be used by:

- American Express;
- Terminal vendors;
- Reader application developers;
- Test tool vendors;
- Expresspay accredited testing laboratories.

1.4. Reference Documents

The following references are cited by this document:

Reference	Document	Version
[PROC]	Expresspay Terminal Level 2 Approval Process	1.0
[SPEC]	Expresspay 3-0 Terminal Specification.pdf	Dated February 2012

1.5. Organization of Document

This document is organised in three sections as follows:

- Certification Information – asks about the product to be certified, previous certification of the kernel and contactless components and details of the vendor;
- Product Information – asks general questions about the product to be certified and the architecture employed;
- Implementation Information – asks detailed questions about the implementation of the Expresspay kernel within the product and support for optional features;

- Declaration.

1.6. Terminology and Conventions

In this document, the use of the words “shall” and “must” indicate mandatory requirements. Use of the words “should” or “advised” indicate recommendations and best practice guidelines.

2.0 Implementation Conformance Statement

2.1. Certification Information

Certification Request	
Product name	UniPay III
Product version <i>If applicable.</i>	A
Certification type	<input checked="" type="radio"/> New Kernel Certification <input type="radio"/> Kernel Update (modification of previously certified kernel) <input type="radio"/> Device Update (using unmodified previously certified kernel)
If this is a kernel or device update, please provide the existing Expresspay Level 2 certification number for this product	N/A
If this is a device update, please provide details as to which components are different than those in the originally certified product	N/A

Vendor information					
Company legal name		ID TECH			
DBA <i>If different from legal name.</i>					
Company address		10721 Walker Street, Cypress California 90630 USA			
Postcode	10721	City	Cypress	State/province	California
Country	USA				
Primary contact's details (This will be used for all Expresspay contactless reader type approval communication)					
First name	Larry	Last name	Meyers		
Title	Vice President of Engineering				
Email address	larrym@idtechproducts.com				
Telephone	(714) 761-6368 x166	Fax			
Company address	10721 Walker Street, Cypress California 90630 USA				

EMVCo Level 1 Certification details	
Version of EMV Contactless Protocol supported	EMV Contactless Specifications for Payment Systems-Version 2.3.1
Level 1 Approval number	10490 1015 231 231b 231a FMT
Date EMV Contactless Protocol certification received <i>If the reader has not yet received EMV Contactless Protocol certification, please provide the certification start date.</i>	October 29, 2015

2.2. Product Information

Product details	
Reader type	<input type="radio"/> Integrated reader <input checked="" type="radio"/> Intelligent reader <input type="radio"/> Transparent Reader
Operating System name and version	uC/OS2
Reader architecture	<input type="radio"/> Modular <input checked="" type="radio"/> Non-Modular
Modular architecture details (To be completed if the reader employs a modular architecture)	
Terminal Architecture Name / Identifier	
If this reader re-uses a previously approved modular architecture, please provide the relevant Modular Approval number	
Checksum function output value for the Expresspay kernel, and any referenced libraries, to be certified <i>Instructions for how to trigger the checksum function must be included with the completed ICS form.</i>	
Proximity Coupling Device details	
PCD ID <i>A unique ID which identifies the PCD embedded in the product.</i>	80149100
PCD hardware name or model number	80149110
PCD software name	80149120
Software version	NEO v1.01
Version number of the Expresspay kernel application to be certified	Amex ExpressPay 3.0, v1.00
Version number of any test application required for certification	JLT v2.05.03

PIN Entry Device information	
Is PIN entry supported?	<input type="radio"/> Yes <input checked="" type="radio"/> No
PED Details (To be completed if the reader supports PIN entry)	
PED Model name	
PED software version	
PED architecture	<input type="radio"/> Standalone <input type="radio"/> Integrated with reader <input type="radio"/> Integrated with terminal
Test device details (Additional information should be provided, if necessary, in the space provided at the end of this form.)	
Reader serial numbers	536T000009~536T000012

2.3. Implementation Information

Where the reader is hard-coded to support, or not support, particular functionality, please check ‘Yes’ or ‘No’ as appropriate in answer to the questions below. Where the reader can be configured (without modification to the Expresspay kernel or any referenced libraries) so as to support, or not support, particular functionality, please check ‘Configurable’. Readers which support such configuration are known as multi-configuration kernel readers.

The inclusion of any ‘Configurable’ answers will identify your reader as being able to be configured to support a variety of implementation requirements from your customers. Your reader will be tested using a variety of configurations to ensure that it is certified for implementation in any of the potential configurations that result from its capabilities. This provides the greatest flexibility for you and your clients whilst providing American Express with the necessary confidence in the product.

Pre-Kernel processing	
The reader must be able to be configured to operate only in Expresspay Magstripe Mode. Please confirm that this is the case by checking the ‘Yes’ checkbox.	<input checked="" type="checkbox"/> Yes
When the reader is configured to operate only in Expresspay Magstripe Mode, is the Amount Authorized made available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the reader detect it will be unable to go online before the transaction starts?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Configurable
Unpredictable range for Expresspay Magstripe mode transactions <i>Default UN range is 0 to 60.</i>	0 to <u>60</u>

Contactless transaction types supported	
Which types of transaction may be supported? (Application Usage Control)	<input checked="" type="checkbox"/> Domestic Cash <input checked="" type="checkbox"/> International Cash <input checked="" type="checkbox"/> Domestic Goods <input checked="" type="checkbox"/> International Goods <input checked="" type="checkbox"/> Domestic Services <input checked="" type="checkbox"/> International Services <input type="checkbox"/> ATM <input type="checkbox"/> Other than ATM

Which Terminal Type settings are supported?	<p>Operational Control:</p> <input type="checkbox"/> Financial Institution <input checked="" type="checkbox"/> Merchant <input type="checkbox"/> Cardholder
	<p>Environment:</p> <input type="checkbox"/> Attended – Online Only <input checked="" type="checkbox"/> Attended – Offline with Online Capability <input type="checkbox"/> Attended – Offline Only <input type="checkbox"/> Unattended – Online Only <input type="checkbox"/> Unattended – Offline with Online Capability <input type="checkbox"/> Unattended – Offline Only

Other Interfaces supported	
Does the reader support the AEIPS contact interface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Configurable

Transaction Processing Capability	
Is the reader capable of processing transactions in Partial Online?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Configurable
Is the reader capable of processing transactions in EMV Full Online?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Configurable
<p>If the reader can be configured to process transactions in EMV Full Online, what is the value of the removal timer?</p> <p>If the timer is configurable, please indicate so by checking the 'Yes' checkbox.</p>	<p>_____ Milliseconds</p> <input type="checkbox"/> Yes
Is the reader capable of processing transactions with Delayed Authorization?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Configurable
Is the reader capable of displaying, printing or communicating the TVR to the test tool after the GENAC1 command is completed during a Magstripe Mode transaction?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the reader return the (unmodified) Terminal Type when both 9F35 and 9F6E are requested in the PDOL?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Offline data authentication	
Does the reader support ODA? <i>ODA is mandatory for all readers except those which are Online Only and do not support Delayed Authorization or EMV Full Online.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Configurable
If the reader supports ODA, what is the maximum length of CA public key supported by the reader?	<u>256x8</u> bits
Does the reader support revocation of an installed CA public key without the key's removal?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Configurable
Does the reader detect CDA failures, related to key recovery, before TAA1?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Configurable

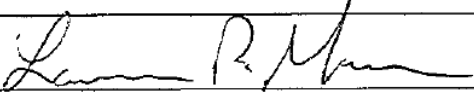
Processing Restrictions	
Is exception list processing supported?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Configurable

Cardholder verification	
The reader must be able to be configured to support Online PIN. Please confirm that this is the case by checking the 'Yes' checkbox.	<input checked="" type="checkbox"/> Yes
The reader must be able to be configured to support Signature. Please confirm that this is the case by checking the 'Yes' checkbox.	<input checked="" type="checkbox"/> Yes
The reader must be able to be configured to support Mobile CVM. Please confirm that this is the case by checking the 'Yes' checkbox.	<input checked="" type="checkbox"/> Yes
The reader must support a configurable deactivation timer (1 to 3 seconds) for when restarting transactions due to Mobile CVM failure. The default value of this timer shall be 1.5 seconds. Please confirm that this is the case by checking the 'Yes' checkbox.	<input checked="" type="checkbox"/> Yes

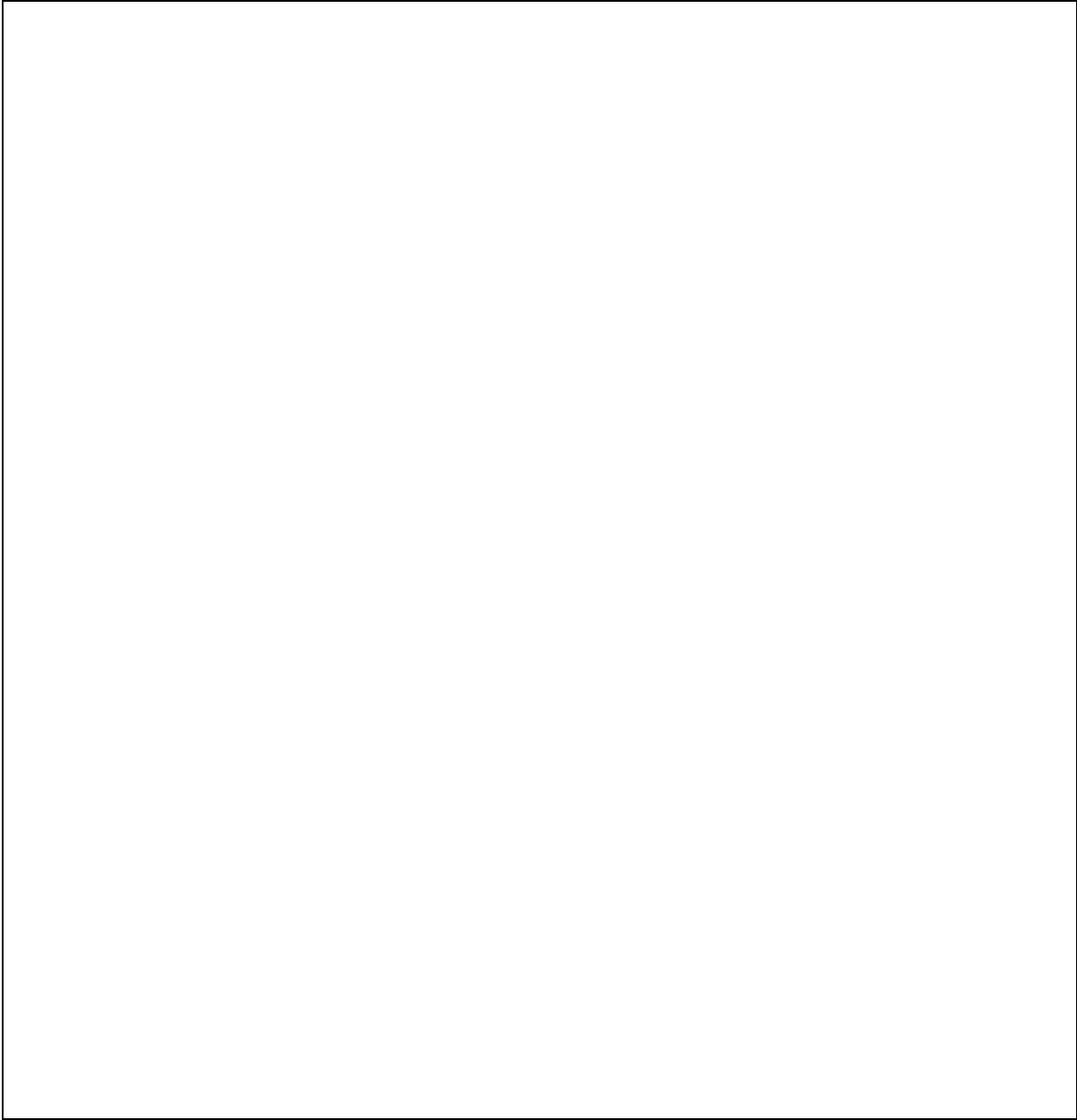
Printing receipts	
Is the reader connected to a terminal with a printing capability? <i>This is mandatory for an integrated reader.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Is the printing of Terminal Verification Results supported?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the printing of Issuer Script results supported? <i>This facility is required for certification of a reader supporting EMV Full Online.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the reader support Cardmember display messages?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

2.4. Declaration

I confirm that all of the information I have provided, in answer to the questions on this form, is correct and complete.	
Name	Larry Meyers
Title	Vice President of Engineering
Signature	
Date	12-8-2015
Modular Architecture Declaration (To be completed if the reader employs a modular architecture)	
Please confirm that the terminal architecture identified above is structured using self-contained modules that can be updated independently.	<input type="checkbox"/> Confirmed <input type="checkbox"/> Not Confirmed
Please confirm that the terminal architecture identified above is capable of calculating a unique checksum value over the Expresspay kernel and any external libraries utilised in the processing of Expresspay transactions.	<input type="checkbox"/> Confirmed <input type="checkbox"/> Not Confirmed
Please confirm that the configuration of a terminal implementing the architecture identified above can be modified without the need for re-compilation of the Expresspay kernel or any external libraries utilised in the processing of Expresspay transactions.	<input type="checkbox"/> Confirmed <input type="checkbox"/> Not Confirmed
Please confirm that you have supplied design documentation in accompaniment with this form which correctly and completely describes the structure and interfaces of the terminal architecture identified above.	<input type="checkbox"/> Confirmed <input type="checkbox"/> Not Confirmed
Please confirm that all products listed above implement the same terminal architecture as described in the accompanying design documentation.	<input type="checkbox"/> Confirmed <input type="checkbox"/> Not Confirmed

2.4. Additional Information



~ End of Document ~