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October 21, 2011

MasterCard® *PayPass*™ Vendor Product – Letter of Approval

Approval Identifier: CLOA-GEMA110901-111021(a), expires on July 25, 2014
Product Vendor: Gemalto
Product Commercial Name: Optelio Contactless D16 R4+
Product Technical Name: GCX5.1-E16-MchpAdv-DI-DS-1.0E-C0A-FullA
Registration Number: DI/GEMA/1109/01/MCADD5/C0A

Under the terms of the M/Chip 4 Development Agreement dated July 17, 2003, this letter permits you to advise your customers that the above product has successfully completed the requirements for a vendor product approval by MasterCard as an **M/Chip Advance Payment & Data Storage v1.0, 3 lines embossing ID-1 Card with a Full antenna (Type A; T=0)**.

Please see page 2 for the Conditions of Approval.

This letter does not constitute an endorsement or warranty by MasterCard regarding the functionality, quality or performance of the submitted product, including without limitation any warranties of merchantability, fitness for purpose or non-infringement, all of which are expressly disclaimed by MasterCard.

The product will be listed on the MasterCard *PayPass* web site as an approved *PayPass* vendor product until the Approval Expiration Date. Any change to the product must be promptly notified to MasterCard.

MasterCard reserves the right to use any approved *PayPass* product as a reference for future testing, certification or approval of other *PayPass* products.

Yours sincerely,

Arnaud du Chéné,
Senior Business Leader
Chip Center of Excellence
MasterCard Worldwide

Details of Vendor Product Approval

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Product Vendor:	Gemalto
Product Commercial Name:	Optelio Contactless D16 R4+
Product Technical Name:	GCX5.1-E16-MchpAdv-DI-DS-1.0E-C0A-FullA
Registration Number:	DI/GEMA/1109/01/MCADDS/C0A
CAST References:	CCN0629, expires on July 25, 2014
Test Assessment References:	PPMC4 A-GEMA100808-CxA-FIM-1009-C016 MCADDS P- GEMA110603-C0A-FIM-1107-C018

MasterCard Reference Specifications

EMV 4.2 – June 2008
<i>PayPass</i> – ISO/IEC 14443 Implementation Specification – Version 1.1 – March 2006
MChip – Card Application Cryptographic Algorithms – March 2010
M/Chip Advance – Payment and Data Storage Version 1.0 – November, 2009
<i>PayPass</i> Application Note #3 (170 / 400 ms Performance Policy) – January 13, 2009
Chip Authentication Program Functional Architecture – February 2007
PLA 2010 Specification – March 2010

Conditions of Approval

None

Product Technical Restrictions

None

Issuer Implementation Notes

None