This document lists recommended configurations (the "Configurations") that have been tested at a MasterCard accredited lab by the named solution vendor.

Before listing the Configurations, MasterCard has taken reasonable steps to ensure the appropriate level testing has been successfully performed.

MasterCard makes no representations or warranties of any kind, express or implied, with respect to the Configurations or the listing.

To the extent possible in applicable law, MasterCard (and its group companies) specifically disclaims all representations and warranties with respect to the Configurations including but not limited to any and all implied warranties of title, non-infringement, 🗵 or suitability for any purpose (whether or not MasterCard has been advised, has reason to know, or is otherwise in fact aware of any information) or achievement of any particular result.

FW upgrade does not extend the scope of configuration previously approved. A device that was not approved for HCE does not automatically become approved for HCE when upgrading to a FW version approved for HCE All vendors must have submitted a representative product of each of their family of products for Android L upgrade and HCE approval before proceeding with an upgrade of FW qualified for SE and HCE support.

The upgrade to a FW qualified for SE and HCE must not change the routing configuration of the originally approved product.

Technical Restriction:

For devices approved to use both an SWP UICC and an embedded Secure Element,

only 1 of the 2 Secure Elements shall be active at the same time when performing payment transactions

Y – Upgrade permitted without device registration/testing

F - Allowed if device is registrered and passes full testing

N - No upgrade nor downgrade allowed T – Upgrade only permitted after device is registered and passes required tests.

PN544 C2

Firmwa	are version cu	rrently used b	y approved d	evice	
107	108.8	108.12	110.01	110.14	110.1
N	N	N	N	N	N
-	N	N	N	N	N

ade	106	-	N	N	N	N	N	N
upgra	107	Y	-	N	N	N	N	N
	108.8	Y	Υ	-	N	N	N	N
n afte	108.12	Υ	Υ	Y	-	N	N	N
rsion	110.01	T	T	Т	Т	-	N	N
Ne.	110.14	T	T	Т	Т	Т	-	N
≥	110.16	T	T	T	T	T	Y	-

PN65N

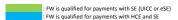
Firmware	version	currently	used b	v an	proved	devic

		106	107	109.8	109.12	109.14	109.16
-8	106	-	N	N	N	N	N
su Bdr	107	Y	-	N	N	N	N
ffer	109.8	Y	Υ	-	N	N	N
siona	109.12	Y	Υ	Y	-	N	N
Ja.	109.14	N	N	N	N	-	N
W	109.16	N	N	N	N	Y	-

PN650 - PN544 C3

Firmware version currently used by approved device

	_						I II III Wale	reision curre	ntry used by a	approved de	vice					
		1.06	1.13	1.20	1.24	1.26	1.30	1.32	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41
	1.06	-	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	1.13	N	-	N	N	N	N	N	N	N	N	N	N	N	N	N
	1.20	N	N	-	N	N	N	N	N	N	N	N	N	N	N	N
a)	1.24	N	N	N	-	N	N	N	N	N	N	N	N	N	N	N
rade	1.26	N	N	N	N	-	N	N	N	N	N	N	N	N	N	N
upgra	1.30	N	N	N	N	N	-	N	N	N	N	N	N	N	N	N
_	1.32	N	N	N	N	N	N		N	N	N	N	N	N	N	N
afte	1.34	N	N	N	N	N	N	N	-	N	N	N	N	N	N	N
sion	1.35	N	N	N	N	N	N	N	N	-	N	N	N	N	N	N
ers	1.36	N	N	N	N	N	N	N	N	N		N	N	N	N	N
≨ l	1.37	N	N	N	N	N	N	N	N	N	N	-	N	N	N	N
Œ	1.38	N	N	N	N	N	N	N	N	N	N	N	-	N	N	N
	1.39	F	F	F	F	Y	Υ	Υ	Υ	Υ	Y	Y	Y	-	N	N
	1.40	F	F	F	F	Y	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	-	N
	1.41	F	F	F	F	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	-



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MasterCard strongly recommends that contactless transactions using a mobile device are not possible when the device is powered off. Hence performing contactless transactions with mobile powered off is out of scope of MasterCard testing/firmware validation.

PN544C2 is called CLF by NXP (ContacLess Front end)	MW by NXP (Android configuration)
PN544 C2 FW 106	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 107	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 108.8	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 108.12	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 110.01	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 110.14	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 110.16	LibNFC1.1 which Hex identifier is 0x8150100

eSE (this is valid when in PN65x configuration)	MW by NXP (Android configuration)
PN544 C2 FW 106	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 107	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 109.8	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 109.9	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 109.12	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 109.14	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C2 FW 109.16	LibNFC1.1 which Hex identifier is 0x8150100

MW by NXP (Android & Windows configuration)
LibNFC1.1 which Hex identifier is 0x8150100
LibNFC1.1 which Hex identifier is 0x8150100
0x08210100
LibNFC1.1 which Hex identifier is 0x8150100
0x08210100
Windows Phone 8 Proximity driver 1.3.0.0 to 1.3.0.4
LibNFC1.1 which Hex identifier is 0x8150100
0x08210100
NFC1.3_R4.0 (_AR4.0_JB for Jelly Bean , Android 4.1.x)
LibNFC1.1 which Hex identifier is 0x8150100
0x08210100
NFC1.3_R4.0 (_AR4.0_JB for Jelly Bean , Android 4.1.x)
Windows Phone 8 Proximity driver 1.3.0.5 to 1.3.0.12
,
LibNFC1.1 which Hex identifier is 0x8150100
0x08210100
NFC1.3_R8.1 (_AR8.1_JBMR1 fo JBMR1 , Android 4.2.x)
LibNFC1.1 which Hex identifier is 0x8150100
0x08210100
LibNFC1.3
NFC1.3 R5.0 (AR5.0 JB for Jelly Bean , Android 4.1.x)
NFC1.3 R8.2 (AR8.2 JBMR1 fo JBMR1 , Android 4.2.x)
LibNFC1.1 which Hex identifier is 0x8150100
0x08210100
LibNFC1.3
NFC1.3 R8.3 (AR5.1 JB for JB Android 4.1.X)
NFC1.3 R8.3 (AR8.3 JBMR1 for Android 4.2.x)
Windows Phone 8 Proximity driver 1.3.0.14 to 1.3.0.16
libnfc on Android 4.3 (libnfc 1.1)
0x08210100
Android NFC1.3 R8.4.0 AR8.4.0 JBMR1
Android NFC1.3 R8.4.0 AR5.2.0 JB
Android NFC1.3 R8.5.0 AR9.1.0 JBMR2
Windows Phone 8 Proximity driver 1.3.0.16
Windows Phone 8.1 Proximity driver 1.3.0.17
0x08210100
NFC1.3 R8.8.0 ARA.1.0 KK
NFC1.3_R8.9.0_ARA.2.0_KK
NFC1.3 R8.A.0 ARA.3.0 mr1 KK
NFC1.3 R8.C.O ARA.4.0 KK
NFC1.3 R8.C.O ARA.4.0 KK
NFC1.3 R8.F.O ARB.2.0 L

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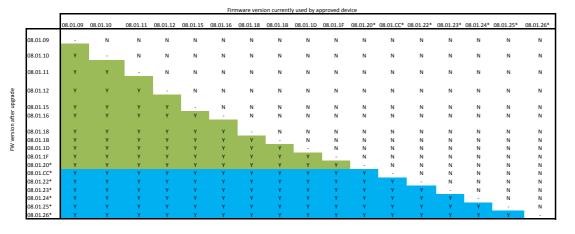
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PN547 C1

		Firmware version currently used by approved device												
	06.03.07	06.03.08	06.03.09	06.03.0A	06.03.0B	06.03.0E	06.03.0F	06.03.12	06.03.13	06.03.14	06.03.15	06.03.16	06.03.18	06.03.19
06.03.07	-	N	N	N	N	N	N	N	N	N	N	N	N	N
06.03.08	N	-	N	N	N	N	N	N	N	N	N	N	N	N
06.03.09	N	N	-	N	N	N	N	N	N	N	N	N	N	N
06.03.0A	N	N	N	-	N	N	N	N	N	N	N	N	N	N
06.03.0B	N	N	N	N	-	N	N	N	N	N	N	N	N	N
06.03.0E	N	N	N	N	N	-	N	N	N	N	N	N	N	N
06.03.0F	Y	N	T	N	T	N	-	N	N	N	N	N	N	N
06.03.12	N	N	N	N	N	N	N		N	N	N	N	N	N
06.03.13	Υ	N	T	N	T	N	Υ	N	-	N	N	N	N	N
06.03.14	N	N	N	N	N	N	N	N	N	-	N	N	N	N
06.03.15	Υ	N	T	N	T	N	Y	N	Υ	N		N	N	N
06.03.16	Y	N	T	N	T	N	Y	N	Υ	N	Υ		N	N
06.03.18	Υ	N	T	N	Т	N	Y	N	Y	N	Υ	Υ		N
06.03.19	Y	N	Т	N	Т	N	Y	N	Y	N	Y	Y	Y	

FW	MW by NXP (Android configuration)	
PN547 C1 06.03.07	NFC2.1R4.2	not allowe
		not allowe
PN547 C1 06.03.08	NFC2.1R4.3	not allowe
PN547 C1 06.03.09	NFC2.1R4.3	not allowe
	NFC2.1R4.4	not allowe
	NFC2.1R4.5	not allowe
	NFC2.1R4.6	not allowe
PN547 C1 06.03.0A	NFC2.1R4.6	not allowe
PN547 C1 06.03.0B	NFC2.1R4.5	not allowe
	NFC2.1R4.6	not allowe
PN547 C1 06.03.0D	NFC2.1R4.8	not allowe
	NFC2.1R4.9	not allowe
PN547 C1 06.03.0E	NFC2.1R4.9	not allowe
PN547 C1 06.03.0F	NFC2.1R4.A	
	NFC2.1R4.9	
PN547 C1 06.03.12	NFC2.1R4.E	not allowe
PN547 C1 06.03.13	NFC2.1R4.D	
PN547 C1 06.03.15	NFC2.1R4.F	
PN547 C1 06.03.16	NFC2.1_R4.10_AR4.10_JB	
PN547 C1 06.03.18	NFC2.1_R4.A_AR4.A_JB	
114547 C1 00.03.10	NFC2.1_R4.12_AR4.12_KK	
PN547 C1 06.03.19	NFC2.1 R4.12 AR4.12 KK	

PN547 C2



w	MW by NXP (Android configuration)
N547 C2 08.01.09	NFC_NCIHAL_AR1.5.0
N547 C2 08.01.10	NFC_NCIHAL_AR1.A.0
N547 C2 08.01.11	NFC_NCIHAL_AR1.9.0 NFC_NCIHAL_AR1.B.0
N547 C2 08.01.12	NFC_NCIHAL_AR1.A.0 NFC_NCIHAL_AR2.1.0
N547 C2 08.01.16	NFC_NCIHAL_AR1.8.0
N547 C2 08.01.15	NFC_NCIHAL_AR2.1.0
N547 C2 08.01.18	NFC_NCIHAL_AR2.2.0_mr1 NFC_NCIHAL_AR2.2.0
N547 C2 08.01.1B	NFC_NCIHAL_AR2.2.0_KK_MR2
N547 C2 08.01.1D	NFC_NCIHAL AR2.3.0_KK
N547 C2 08.01.1F	NFC_NCIHAL_AR 2.3.0
N547 C2 08.01.20	NFC_NCIHAL_2.5.0_KK
N547 C2 08.01.CC	NFC_NCIHAL_AR2.4.0_KK
N547 C2 08.01.22	NFC_NCIHAL_AR3.1.0_L
N547 C2 08.01.23	NFC_NCIHAL_AR3.1.0_L
N547 C2 08.01.24	NFC_NCIHAL_AR3.2.0_L
N547 C2 08.01.25	NFC_NCIHALx_ARF.3.1.0_L
N547 C2 08.01.26	NFC_NCIHAL_ARF 4.1.0_M

* FW upgrade is only approved for SWP handset

: FW is qualified for payments with SE (UICC or eSE) : FW is qualified for payments with HCE and SE Y – Upgrade permitted without device registration/testing

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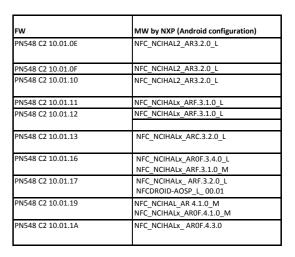
PN548 C2

FW version after upgrade

Firmware version currently used by approved device

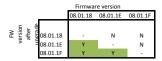
		minimula vers	ion carrent,	asca sy ap	proved devi						
	10.01.0E	10.01.0F	10.01.10	10.01.11	10.01.12	10.01.13*	10.01.13*	10.01.16*	10.01.17*	10.01.19*	10.01.1A*
10.01.0E	-	N	N	N	N	N	N	N	N	N	N
10.01.0F	Т	-	N	N	N	N	N	N	N	N	N
10.01.10	Т	Т	-	N	N	N	N	N	N	N	N
10.01.11	Т	T	Т	-	N	N	N	N	N	N	N
10.01.12	Т	T	Т	Т	-	N	N	N	N	N	N
10.01.13*	Υ	Υ	Υ	Υ	Υ	-	N	N	N	N	N
10.01.15*	Υ	Υ	Υ	Υ	Υ	Υ	-	N	N	N	N
10.01.16*	Υ	Υ	Υ	Υ	Υ	Υ	Υ	-	N	N	N
10.01.17*	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	-	N	N
10.01.19*	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	-	N
10.01.1A*	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	-

: FW is qualified for payments with SE (UICC or eSE) : FW is qualified for payments with HCE and SE



^{*} FW upgrade is only approved for SWP handset

PN547 C2



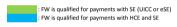
PN548 C2

		Firmware version currently used by approved device					
		10.01.0E	10.01.0F	10.01.10	10.01.11	10.01.12	10.01.13
FW version after upgrade	10.01.0E	-	N	N	N	N	N
	10.01.0F	Т	-	N	N	N	N
	10.01.10	т	Т	-	N	N	N
	10.01.11	Υ	Υ	Υ	-	N	N
	10.01.12	T	T	T	T	-	N
Z	10.01.13	Υ	Υ	Υ	Υ	Υ	-

PN551

		Firmware version currently used by approved device		
		10.03.06	10.03.07	
<u>-</u>	10.03.06	-	N	
FW version after upgrade	10.03.07	Т	-	

* FW upgrade is only approved for SWP handset



FW	MW by NXP (Android configuration)
PN547 C2 08.01.18	NFC_NCIHAL_AR2.5.0_KK_OSP
PN547 C2 08.01.1E	NFC_NCIHAL-AR2.7.0_OSP_KK
PN547 C2 08.01.1F	NFC_NCIHAL_AR2.7.0_OSP_KK

FW	MW by NXP (Android configuration)
rvv	
PN548 C2 10.01.0E	NFC_NCIHALx_ARD.3.5.0_L_OSP
PN548 C2 10.01.0F	NFC_NCIHALx_ARD.3.5.0_L_OSP_mr2
PN548 C2 10.01.10	NFC_NCIHALx_ARD.3.6.0_L_OSP
PN548 C2 10.01.11	NFC_NCIHALx_ARD.3.6.0_L_OSP
PN548 C2 10.01.12	NFC_NCIHALx_ARD.3.6.0_L_OSP
PN548 C2 10.01.13	NFC_NCIHALx_ARD.3.7.0_L_OSP

FW	MW by NXP (Android configuration)
10.03.06	NFC_NCIHALx_ 4.3.0_M