

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 registered and passes full testing
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T - Upgrade only permitted after device is registered and passes required tests.

PN544 C2

		Firmware version currently used by approved device						
		106	107	108.8	108.12	110.01	110.14	110.16
FW version after upgrade	106	-	N	N	N	N	N	N
	107	Y	-	N	N	N	N	N
	108.8	Y	Y	-	N	N	N	N
	108.12	Y	Y	Y	-	N	N	N
	110.01	T	T	T	T	-	N	N
	110.14	T	T	T	T	T	-	N
	110.16	T	T	T	T	T	Y	-

PN65N

		Firmware version currently used by approved device					
		106	107	109.8	109.12	109.14	109.16
FW version after upgrade	106	-	N	N	N	N	N
	107	Y	-	N	N	N	N
	109.8	Y	Y	-	N	N	N
	109.12	Y	Y	Y	-	N	N
	109.14	N	N	N	N	-	N
	109.16	N	N	N	N	Y	-

PN650 - PN544 C3

		Firmware version currently used by approved device														
		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
FW version after upgrade	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
	1.24	N	N	N	-	N	N	N	N	N	N	N	N	N	N	N
	1.26	N	N	N	N	-	N	N	N	N	N	N	N	N	N	N
	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
	1.34	N	N	N	N	N	N	N	-	N	N	N	N	N	N	N
	1.35	N	N	N	N	N	N	N	N	-	N	N	N	N	N	N
	1.36	N	N	N	N	N	N	N	N	N	-	N	N	N	N	N
	1.37	N	N	N	N	N	N	N	N	N	N	-	N	N	N	N
	1.38	N	N	N	N	N	N	N	N	N	N	N	-	N	N	N
	1.39	F	F	F	F	F	Y	Y	Y	Y	Y	Y	Y	Y	-	N
	1.40	F	F	F	F	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	-
	1.41	F	F	F	F	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	-

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

Y is only valid when the FW upgrade is done with one of the MW indicated in the tables on the right. Any other combination request T MasterCard reserves the right to change the list of approved firmware/CLF without prior notice 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 (ContaLess 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

PN544C3 is called CLF by NXP (ContaLess Front end)	MW by NXP (Android & Windows configuration)
PN544 C3 FW 1.6	LibNFC1.1 which Hex identifier is 0x8150100
PN544 C3 FW 1.13	LibNFC1.1 which Hex identifier is 0x8150100 0x08210100
PN544 C3 FW 1.20	LibNFC1.1 which Hex identifier is 0x8150100 0x08210100 Windows Phone 8 Proximity driver 1.3.0.0 to 1.3.0.4
PN544 C3 FW 1.24	LibNFC1.1 which Hex identifier is 0x8150100 0x08210100 NFC1.3_R4.0 (AR4.0_JB for Jelly Bean , Android 4.1.x)
PN544 C3 FW 1.26	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
PN544 C3 FW 1.30	LibNFC1.1 which Hex identifier is 0x8150100 0x08210100 NFC1.3_R8.1 (AR8.1_JBMR1 for JBMR1 , Android 4.2.x)
PN544 C3 FW 1.32	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 for JBMR1 , Android 4.2.x)
PN544 C3 FW 1.34	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
PN544 C3 FW 1.35*	libnfc on Android 4.3 (libnfc 1.1) 0x08210100
PN544 C3 FW 1.36	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
PN544 C3 FW 1.37	NFC1.3_R8.8.0_ARA.1.0_KK NFC1.3_R8.9.0_ARA.2.0_KK
PN544 C3 FW 1.38	NFC1.3_R8.A.0_ARA.3.0_mr1_KK
PN544 C3 FW 1.39	NFC1.3_R8.C.0_ARA.4.0_KK
PN544 C3 FW 1.40	NFC1.3_R8.C.0_ARA.4.0_KK
PN544 C3 FW 1.41	NFC1.3_R8.F.0_ARB.2.0_L

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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
FW version after upgrade	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	Y	N	T	N	T	N	Y	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	Y	N	T	N	T	N	Y	N	Y	N	-	N	N	N
	06.03.16	Y	N	T	N	T	N	Y	N	Y	N	Y	-	N	N
	06.03.18	Y	N	T	N	T	N	Y	N	Y	N	Y	Y	-	N
06.03.19	Y	N	T	N	T	N	Y	N	Y	N	Y	Y	Y	-	

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

PN547 C2

		Firmware version currently used by approved device															
		08.01.09	08.01.10	08.01.11	08.01.12	08.01.15	08.01.16	08.01.18	08.01.1B	08.01.1D	08.01.1F	08.01.20*	08.01.22*	08.01.23*	08.01.24*	08.01.25*	08.01.26*
FW version after upgrade	08.01.09	-	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	08.01.10	Y	-	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	08.01.11	Y	Y	-	N	N	N	N	N	N	N	N	N	N	N	N	N
	08.01.12	Y	Y	Y	-	N	N	N	N	N	N	N	N	N	N	N	N
	08.01.15	Y	Y	Y	Y	-	N	N	N	N	N	N	N	N	N	N	N
	08.01.16	Y	Y	Y	Y	Y	-	N	N	N	N	N	N	N	N	N	N
	08.01.18	Y	Y	Y	Y	Y	Y	-	N	N	N	N	N	N	N	N	N
	08.01.1B	Y	Y	Y	Y	Y	Y	Y	-	N	N	N	N	N	N	N	N
	08.01.1D	Y	Y	Y	Y	Y	Y	Y	Y	-	N	N	N	N	N	N	N
	08.01.1F	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	N	N	N	N	N	N
	08.01.20*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	N	N	N	N	N
	08.01.22*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	N	N	N	N
	08.01.23*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	N	N	N
	08.01.24*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	N	N
	08.01.25*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	N
	08.01.26*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-

FW	MW by NXP (Android configuration)	
PN547 C2 08.01.09	NFC_NCIHAL_AR1.5.0	
PN547 C2 08.01.10	NFC_NCIHAL_AR1.A.0	
PN547 C2 08.01.11	NFC_NCIHAL_AR1.9.0	
	NFC_NCIHAL_AR1.B.0	
PN547 C2 08.01.12	NFC_NCIHAL_AR1.A.0	
	NFC_NCIHAL_AR2.1.0	
PN547 C2 08.01.16	NFC_NCIHAL_AR1.8.0	
PN547 C2 08.01.15	NFC_NCIHAL_AR2.1.0	
PN547 C2 08.01.18	NFC_NCIHAL_AR2.2.0_mr1	
	NFC_NCIHAL_AR2.2.0	
PN547 C2 08.01.1B	NFC_NCIHAL_AR2.2.0_KK_MR2	
PN547 C2 08.01.1D	NFC_NCIHAL_AR2.3.0_KK	
PN547 C2 08.01.1F	NFC_NCIHAL_AR.2.3.0	
PN547 C2 08.01.20	NFC_NCIHAL_2.5.0_KK	
PN547 C2 08.01.22	NFC_NCIHAL_AR2.4.0_KK	
PN547 C2 08.01.23	NFC_NCIHAL_AR3.1.0_L	
PN547 C2 08.01.24	NFC_NCIHAL_AR3.1.0_L	
PN547 C2 08.01.24	NFC_NCIHAL_AR3.2.0_L	
PN547 C2 08.01.25	NFC_NCIHAL_ARF.3.1.0_L	
PN547 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



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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*	10.01.13*	10.01.16*	10.01.17*	10.01.19*	10.01.1A*
FW version after upgrade	10.01.0E	-	N	N	N	N	N	N	N	N	N	N
	10.01.0F	T	-	N	N	N	N	N	N	N	N	N
	10.01.10	T	T	-	N	N	N	N	N	N	N	N
	10.01.11	T	T	T	-	N	N	N	N	N	N	N
	10.01.12	T	T	T	T	-	N	N	N	N	N	N
	10.01.13*	Y	Y	Y	Y	Y	-	N	N	N	N	N
	10.01.15*	Y	Y	Y	Y	Y	Y	-	N	N	N	N
	10.01.16*	Y	Y	Y	Y	Y	Y	Y	-	N	N	N
	10.01.17*	Y	Y	Y	Y	Y	Y	Y	Y	-	N	N
	10.01.19*	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	N
	10.01.1A*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-

* 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

FW	MW by NXP (Android configuration)
PN548 C2 10.01.0E	NFC_NCIHAL2_AR3.2.0_L
PN548 C2 10.01.0F	NFC_NCIHAL2_AR3.2.0_L
PN548 C2 10.01.10	NFC_NCIHAL2_AR3.2.0_L
PN548 C2 10.01.11	NFC_NCIHALx_ARF.3.1.0_L
PN548 C2 10.01.12	NFC_NCIHALx_ARF.3.1.0_L
PN548 C2 10.01.13	NFC_NCIHALx_ARC.3.2.0_L
PN548 C2 10.01.16	NFC_NCIHALx_AROF.3.4.0_L NFC_NCIHALx_ARF.3.1.0_M
PN548 C2 10.01.17	NFC_NCIHALx_ARF.3.2.0_L NFCDROID-AOSP_L_00.01
PN548 C2 10.01.19	NFC_NCIHAL_AR 4.1.0_M NFC_NCIHALx_AROF.4.1.0_M
PN548 C2 10.01.1A	NFC_NCIHALx_AROF.4.3.0

PN547 C2

FW version after upgrade	Firmware version		
	08.01.18	08.01.1E	08.01.1F
08.01.18	-	N	N
08.01.1E	Y	-	N
08.01.1F	Y	Y	-

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

PN548 C2

FW version after upgrade	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	
10.01.0E	-	N	N	N	N	N	
10.01.0F	T	-	N	N	N	N	
10.01.10	T	T	-	N	N	N	
10.01.11	Y	Y	Y	-	N	N	
10.01.12	T	T	T	T	-	N	
10.01.13	Y	Y	Y	Y	Y	-	

FW	MW by NXP (Android configuration)
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

PN551

FW version after upgrade	Firmware version currently used by approved device	
	10.03.06	10.03.07
10.03.06	-	N
10.03.07	T	-

FW	MW by NXP (Android configuration)
10.03.06	NFC_NCIHALx_4.3.0_M

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 T : FW is qualified for payments with HCE and SE