Kiosk III V1.10.116 Change List

Important History Events:

* Kiosk III NSRED release on 7/24/2015, released main application version is NEO v1.00.010, boot loader version is KIOSKIII-BL-V3.00.005.
* Kiosk III NSRED chip changed from 512K flash to 1M size, on 09/24/2015, main application version is NEO v1.00. 012, boot loader version is KIOSKIII-BL-V3.00.010.
* Kiosk III NSRED added P2P on 11/10/2015, NEO v1.00.014.
* Kiosk III NSRED supports Apple VAS on 01/18/2016, NEO v1.00.017.
* Kiosk III NSRED changed encryption function on 01/20/2016, NEO v1.10.001.
* Kiosk III NSRED use Vivopay Key Loading to local load Admin DUKPT Key (RKI-KEK) and remove Silk2.0 protocol on 05/17/2016, NEO v1.10.018.
* Kiosk III NSRED firmware version number changed to format as "Kiosk III NEO v1.10.XXX" on 05/26/2016, Kiosk III NEW v1.10.021.
* Kiosk III NSRED firmware “Kiosk III NEO v1.10” released on 7/21/2016, main application version is Kiosk III NEO v1.10.042, boot loader version is KIOSKIII-BL-V3.00.015
* Kiosk III NSRED firmware released on 12/1/2016, main application version is Kiosk III NEO v1.10.064, boot loader version is KIOSKIII-BL-V3.00.019.
* Kiosk III NSRED vs. SRED firmware merged together on 12/19/2016 on version Kiosk III V1.10.066.

Detail Revision History:

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| Version | Date | Description of Changes |
| Kiosk III V1.10.116 | 4/04/2018 | 1. PayPass MTIP test MCC 373 does not return "See Phone" asynchronous UI message event.  2. Requests tag 5F28 (Issuer Country Code) to return in Activate transaction response.  3. Fix auto mode DF8112 length error.  4. Fix ePurse key type error. Only 1 or 2 is acceptable. |
| Kiosk III V1.10.114a | 03/02/2018 | 1. Change L1 speed for a special case which has wrong CRC with large data. (CS-1641) |
| Kiosk III V1.10.113 | 03/02/2018 | 1. Add Tags to Read (DF8112, FF8104).  2. Support 3911B.  3. Change default value for DFED11 to 0x01. |
| Kiosk III V1.10.112 | 12/29/2017 | 1. Change Non-EMV tags according to internal table.  2. Token tag 9F19 added formerly.  3. Fixed some bugs, updated FW for  Online Pin Entered bit is not set for Amex  EMV capable visa card will fail on the transaction and response (0x0A).  4. Apple VAS, Second VAS Transaction Always Fail  5. Activate Transaction - Invalid tag inside VAS container is not causing the reader to return invalid parameters to Activate Transaction |
| Kiosk III V1.10.111 | 12/12/2017 | 1. Firmware 1.10.110c - Auto Poll is not working  2. Customer requesting support for two AIDs  3. Online Pin Entered bit is not set for Amex  4. EMV capable visa card will fail on the transaction and response (0x0A). |
| Kiosk III V1.10.109 | 11/13/2017 | 1. Support transaction type 0x93.(CS-1543)  2. Support Smart Tap 2.1.  3. Add Apple VAS tag for ACT command.  4. Non-EMV tags output option support. Below is the list of OLD tag and corresponding NEW tag. Tag DFED11 control this feature (1 uses OLD tags while 0 uses NEW tags)  0xFFF0  ---> 0xdf8901  //Specific Feature Switch,Used with Visa VCPS 2.1.1/2.1.2. It controls Visa CVN17 support and Track 1 & 2 data in the transaction response.  0xFFF1 ---> 0xDF8913  //Terminal Contactless Transaction Limit, Never be used for Paypass  0xFFF2 ---> 0x9F1E //Terminal IFD Serial Number  0xFFF3 ---> 0xdf8902  //Application Capability  0xFFF4 ---> 0xdf8903  //Visa Reader Risk Flags  0xFFF5 --->  0xDF8126  //CVM Required Limit  0xFFF7 ---> 0xdf8904  //Enable/Disable Burst Mode:Value = 00: Disable Burst Mode Value = 01: Enable Burst Mode Value = 02: Burst Mode Auto Exit. Burst Mode is turned off as soon as a transaction command is received  0xFFF8 ---> 0xdf8905  //UI Scheme:Value = 00:ViVOtech User Interface Value = 02:Visa Wave User Interface Value = 03:EMEA User Interface  0xFFF9 ---> 0xdf8906  //LCD Font Size  0xFFFA ---> 0xdf8907  //LCD delay time(ms)  0xFFFB ---> 0xdf8908  //Language Option for LCD display:  0xFFFC ---> 0xDF811B  //PayPass Profile  0xFFFD ---> 0xDF8122  //Terminal Action Code (Online)  0xFFFE ---> 0xDF8120  //Terminal Action Code (Default)  0xFFFF ---> 0xDF8121  //Terminal Action Code (Denial)  0xFFE0 ---> 0xdf8909  //Registered Application Provider Identifier(RID)Sys =NEVER,User = OPT,Identifies the payment system to which the Certification Authority Public Key is associated. If this Tag is not provided the first five bytes from the AID are used.  0xFFE1 ---> 0xdf890a  //Partial Selection Allowed,OPT,(Visa MAND),Tells the reader to allow partial selection during the initial select process. 01 = Allowed, 00 = Disabled,Note: Required for Visa application flow, this value is set to 01 Allowed and cannot be changed.  0xFFE2 ---> 0xdf890b  //Application Flow,Sys =NEVER,User = MAND  0xFFE3 ---> 0xdf890c  //Selection Features – Flags for selection features specific to this AID.  0xFFE4 ---> 0xdf890d  //The Group Number associated with the Configurable AID functions  0xFFE5 ---> 0xdf890e  //Maximum AID Length,CON,16 bytes.Note: This is MANDATORY TLV if the FFE1 Partial Select TLV is included. For Visa application flow, this value is set to 16 and cannot be changed.  0xFFE6 ---> 0xdf890f  //AID Disabled,OPT,Used to disable a System AID (has no effect on a User AID). 80h = disabled and 00h = enabled  0xFFE8 ---> 0xdf8910  //Exclude from Processing - Indicates that this AID should not be considered as a Terminal Supported AID for the specified Selection Methods.  0xFFE9 ---> 0xdf8911  //Kernel ID Transaction Type Group List – defines a kernel ID, a transaction type and a group number (triplet). This TLV uses variable length data, three bytes at a time up to 24 bytes. DO NOT PAD.  0xFFEA ---> 0xDF810C //Configurable Kernel Identifier – Used to define the Reader  0x9F80 ---> 0xdf8912 //DCVV version1.0,for discover both zip & dpass  5. Serial number padding is 0x30 instead of 0x00.  6. Prefer Brand support. |
| Kiosk III V1.10.099 | 07/26/2017 | 1. Add definition '\_SMARTTAP13\_SUPPORT\_'.  2. Can't read blocks (status0A for 2C-07) after a error 2C-0A message.  3. error code "05" will response after sending end transaction command (02-40) when testing CUP card. |
| Kiosk III V1.10.098 | 07/17/2017 | Mifare Read (2c 07) returns junk data |
| Kiosk III V1.10.097 | 07/05/2017 | In order to satisfy PCI delta requirement, reader refuse to input sensitive data into SAM in SRED mode. (Only valid for SRED version) |
| Kiosk III V1.10.096 | 07/04/2017 | 1. Wrong TVR value in DE55  2. Wrong AC during approval  3. Mastercard/CB card read error |
| Kiosk III V1.10.095 | 06/30/2017 | 1. PAR 9F24 Data Object Returned  2. mifare read write nack or junk |
| Kiosk III V1.10.094 | 06/09/2017 | 1. Visa Paywave test case A5 11 15 (Comms Error: Set A15) FAILS.  2. Visa Paywave test cases A5 01 02 & A5 01 03 (Electron and VPAY).  3. the length of the response Get ViVOpay Firmware Version (29-00) is error.  4. extra "00" response after sending protocol 1 command Get ViVOpay Firmware Version (29-00). |
| Kiosk III V1.10.093 | 06/07/2017 | 1.CS1143: for CB card based on MChip, only avoid duplicate check for 9F6E |
| Kiosk III V1.10.092 | 05/31/2017 | 1. ISO7816\_3\_DRV\_VERSION "1.07". |
| Kiosk III V1.10.091 | 05/18/2017 | 1. Delete some commented codes in CUP. |
| Kiosk III V1.10.090 | 05/16/2017 | 1. FThe response will be changed when sending raw data to PICC(2c-04).  2. The default value of FFF3 in group2 is 07FF. |
| Kiosk III V1.10.089 | 05/15/2017 | 1. The response will be changed when sending raw data to PICC(2c-04). |
| Kiosk III V1.10.086 | 05/09/2017 | 1. Update ISO7816 Lib to V1.06, fixed some bugs.  2. Paypass output missing DF76 TLV |
| Kiosk III V1.10.085 | 05/04/2017 | 1. SAM reverse to #081. |
| Kiosk III V1.10.084 | 05/04/2017 | 1. CS1112: support Continuous USB Response, add different choice for USB ReportID  2. Card polling issue when reader power on. |
| Kiosk III V1.10.083 | 04/28/2017 | 1. optimize DEBUG\_PRINT function in ContactReader() for USB.  2. Add CUP brand  3. add 8E in transaction output(Discover/Amex/Paypass/Interac)  4. return message length fixed when fourbitflag not set but actually returned 36 bit.(it should 5 bytes into extract-parity function and return 4 bytes), originally low level function returns 1 more byte(44 bits), but at extract-parity function(input 5 byte, returns 4 bytes), it cut 1 more byte off, so it returns 4 bytes.  5. Unable to detect Collision error.  6. timing/ antenna signal strength for Peer to Peer messages.  7. Reduce power on time. |
| Kiosk III V1.10.082 | 04/11/2017 | 1. beeper always beep when sending poll for token command quickly after Buzzer Control (0B-xx)  2. ISO7816\_3\_TEST\_LIB "V1.4", ISO7816\_3\_DRV\_VERSION "1.03"  3. Update ISO7816 Lib to V1.04, Support TA1=0x00-0x05,0x11-0x15,18,96.  4. Update ISO7816 Lib to V1.05, fix a bug of pps\_exchange(0x11). |
| Kiosk III V1.10.081 | 03/14/2017 | 1. Sometimes there is no the ApplePay VAS Container TLV (tag FFEE06) response.  2. the un-full byte:4 bits is not processed in the command.  3. ctls\_getAllConfigurationGroups():the result of this function seemed unstable.  4. Extra "00" will response in response data.  5. the default of FF F7 is 02 in group 2. |
| Kiosk III V1.10.080 | 03/10/2017 | 1. read ViVOcom card fail.  2. Updating the ISO7816 driver for supporting the TA1=01-07,97.  3. Add secure passthrough in SAM interface for 2C-13 cmd |
| Kiosk III V1.10.079 | 03/07/2017 | 1. Domestic VISA card not accepted, but is accepted on KioskII.  2. PT mode Spain card found Antenna removed error.  3. Modified for Issue 339,340,342,345,346  4. ETEC card returns 0x29 0x290x29 (junk data) in Gen AC. |
| Kiosk III V1.10.078 | 02/28/2017 | 1. Sometimes PT mode ON sometimes Activate Transaction is returning the antenna removed error.  2. Set Enhanced Collision DF7F=2 fails the Visa tests. Per KII's feature.  3. Update the ISO7816 driver to 1.01.  4. deal with padding 'F' in 5A mask data  5. Domestic VISA card not accepted, but is accepted on KioskII.  6. No 'S' in the end of get protocol 1 firmware version. |
| Kiosk III V1.10.077 | 02/17/2017 | 1. can't stop pass-through mode.  2. Tag DFEF4D for AMEX Cards must return MSR formatted track data.  3. Sometime got error 0x0A when using Mifare Read/Write Blocks.  4. ISO7816-3 T=0/1 Test Library V.4  5. no response every time after sending enhance poll for token when using slot 2. |
| Kiosk III V1.10.076 | 02/13/2017 | 1. Transaction did not terminate when Select PPSE returns no AIDs.  2. Add TAMPERATURE\_LOW\_VERIFY  3. Tag DFEF4D for AMEX Cards must return MSR formatted track data |
| Kiosk III V1.10.075 | 02/04/2017 | 1. no response after sending command Enhanced PT - Deactivate - SAM1 twice until repower on.  2. CB(qVSDC based) mobile phone transactions aborted. |
| Kiosk III V1.10.074 | 01/26/2017 | 1. Fix a buffer flow in UpdateFile\_sub()  2. Reader did not detected card type=02(ISO 14443 Type B).  3. not stop pass-through mode after start pass-through and read card successfully.  4. -SAM card will response fail after response success every time when sending enhance poll for token. |
| Kiosk III V1.10.073 | 01/20/2017 | 1. cmd 2C 0B internal timeout did not work correctly.  2. Compatible Test: VCPS approve transaction difference between K2/K3.  3. Update the CT L1 driver for ISO7816 protocol. |
| Kiosk III V1.10.072 | 01/12/2017 | 1. Test 5.11.01-6986 GPO response Missing card tap  2. Kiosk III V1.10.069---can't stop passthrough mode |
| Kiosk III V1.10.071 | 01/11/2017 | 1. Fix Get RTC error.  2. Reader did not detected card type=02(ISO 14443 Type B)  3. Test 5.11.01-6986 GPO response Missing card tap |
| Kiosk III V1.10.070 | 12/30/2016 | Get two Vivotech2 responses when using Get All Groups (03 07) cmd. |
| Kiosk III V1.10.069 | 12/29/2016 | 1. 1.10.067s---0200 will response after sending ACTIVE TRANSACTION at once.  2. 1.10.064---0200 will response after sending ACTIVE TRANSACTION at once.  3. 1.10.068-----FF F7 default value of group 2 is 00.  4. Compatible Test: VCPS When CA public key missing, RF State Code = 0x04.  5. Compatible test - DVT - Kiosk III v1.10.027-Tag DF26=00 haven't the function.  6. Kiosk III V1.10.066.S---beeper not beep when calibrating short cable.  7. Kiosk III v1.10.068---no Apple VAS response after reading apple pay when there is no merchant.  8. Visa ApplePay does not produce tag data in MSR Equivalent Tags.  9. Kiosk III NEO v1.10.054---beeper always beep when sending poll for token command quickly after Buzzer Control (0B-xx). |
| Kiosk III V1.10.068 | 12/26/2016 | 1. Kiosk III V1.10.067.S---No 'S' in the end of firmware version Kiosk III V1.10.067.  2. 1.10.057S---ffee 02 output twice.  3. KioskIII- FW061 | Manual Reliability test -- Sometime got NACK response at command 2C 03.  4. KioskIII - FW#64 | Test 5.11.01-6986 GPO response Missing card tap. |
| Kiosk III V1.10.067 | 12/22/2016 | 1. Can not load key.  2. Kiosk III V1.10.066.S---extra TLVs output when swiping Visa MSD card.  3. Bootload fail. |
| Kiosk III V1.10.066 | 12/19/2016 | 1. NSRED vs. SRED merging  2. Add CS issues resolve, sync with NSRED FW "Kiosk III NEO v1.10.064"(SVN rev. 6398).  3. Fix issue 5A mask with 'F' at the end.  4. Fix issue, set RTC error when device just produced.  5. KioskIII- CB based on qVSDC  6. Change FW version format to "Kiosk III V1.10[.S]" and "Kiosk III V1.10.XXX[.S]" |
| Kiosk III NEO v1.10.064 | 11/22/2016 | 1. Fix bug, get cable type  2. Bump to version #064. |
| Kiosk III NEO v1.10.063 | 11/21/2016 | 1. Add two set of calibration values for long and short cables.  2. Provide two commands to set/get cable type.  3. 1.10.062---set auto poll and poll on demand, return card data  4. 1.10.062---auto poll mode, read card contiuously |
| Kiosk III NEO v1.10.062 | 11/17/2016 | 1. Kiosk III NEO v1.10.041----reponses are not the same when removed the antenna in passthrough mode and not in passthrough mode  2. KioskIII- FW 061| Missing USB IN report after Cancel cmd (05 01) |
| Kiosk III NEO v1.10.061 | 11/15/2016 | 1. Fix buffer flow  2. Kiosk III-1.10.031-The status is not correct when set Enable Media Detection or Removal reporting |
| Kiosk III NEO v1.10.060 | 11/14/2016 | 2C 70 error. |
| Kiosk III NEO v1.10.059 | 11/11/2016 | 1. 0x70, antenna check  2. 0x70, antenna check and collision detect.  3. Add internal command to retrieve A/D converter data. |
| Kiosk III NEO v1.10.058 | 11/10/2016 | 1. KioskIII- FW 55| Got Unsupported card error when added domestic AID(A0 00 00 02 28 10 10) to MC kernel  2. KioskIII - Collision Detection did not work in Enhanced Poll for Token  3. KioskIII- FW 55/BL 19 |Stress test failed  4. Improve USB  5. Bump to version #058 |
| Kiosk III NEO v1.10.057 | 11/07/2016 | 1. KioskIII - NEOv1.10 Autopoll doesn't activate reader  2. Add SmartTap AID into System AID list  3. Add SmartTap Disable function in System AID list |
| Kiosk III NEO v1.10.056 | 11/03/2016 | 1. "The errors I see are mainly 2C 08 errors from the enhanced poll for token command, which is a timeout error. But the timeout is set to 30s for my test, and I get an error back before this. "  2. KioskIII - NEOv1.10 Autopoll doesn't activate reader.  3. KIOSK III CCR | Kiosk III NEO v1.10.055 | STRESS TEST FAILED. |
| Kiosk III NEO v1.10.055 | 10/31/2016 | 1. BL3.00.019 FW52\_A - ACT sent just after receiving a timeout status response from the previous ACT is getting ignored/ no response is sent to it2. BL 3.00.019 FW052\_A- Got no response on the second ACT after receiving a NAK status response from first ACT/High Failure reading on ViVOtech test card |
| Kiosk III NEO v1.10.054 | 10/21/2016 | 1.Add 03-40 command  2. when send NAK for protocol1 response, set length field to 0. Avoid length wrong if previous command is protocol2 command |
| Kiosk III NEO v1.10.053 | 10/19/2016 | 1. add command 02-40  2. add New Tag DFEF4D function  3. add encryption masked TLVs in output format  4. add New Tag DFEF4D encryption  5. Add New Tag DFEF4D in Interac response  6. KioskIII- BL 3.00.019 FW052- Second Activate trans returning NAK when no card is over or near antenna |
| Kiosk III NEO v1.10.052 | 10/13/2016 | 1. MC card with same data behaved differently on KII and KIII |
| Kiosk III NEO v1.10.051 | 10/12/2016 | 1. 09-03 response different per VID&PID.  2. Add 0xFFE8 'Exclude from Trial and Error  processing' feature for MChip.  3. KIII- Got the "Media removed" event only after ACT timeout when do a quick-tap-and-go scenario  4. Now we should get “media removal” event after 5-6 seconds after a transaction irrespective of card’s presence (same a kiosk-II)."  5. Sporadic Status code = 0x70 (even though antenna is connected)  6. Move backward compatible feature to Main Application  7. KioskIII- cmd 0x04B 0x0D 0x0A did not return BL version (Backward compatibility w/ KII) |
| Kiosk III NEO v1.10.050 | 09/30/2016 | 1.Discover, Amex FF69 modification  2. Visa,interact FF69 modification  3. Remove SmartTap unnecessary AID |
| Kiosk III NEO v1.10.049 | 09/29/2016 | 1. Add tlv tag DFEF54 to configure SmartTap AID  2. Media removed event even though card not removed (For type a card)  3. Prop tag for Visa and Interac, some modifications  4. modify Amex, Discover FF69 |
| Kiosk III NEO v1.10.048 | 09/23/2016 | 1.Add Pin Variant function for Data encrpytion Key  2. RS232 no response  3. Discover, Amex prop tag PPSE BF0C  4. Media removed event even though card not removed (For type b card)  5. Prop tag for Interac  6. Prop tag (Visa and Interac)  7. Get RTC command issue.  8. Stop responding if phone/card is left over antenna after a bad read  9. make change to collision issue. |
| Kiosk III NEO v1.10.047 | 09/12/2016 | 1. 9F6D Group config  2. media arrival event message missing for ViVOcard.  3. add Form Factor(0x9f70) to INTERAC output.  NOTE: This version should be used together with BL "KIOSKIII-BL-V3.00.018". |
| Kiosk III NEO v1.10.046 | 08/29/2016 | 1. Fix FWKIIISRED-38: not use function in Encrypt embedded TLV  2. G0 97 tag setting  3. Add feature of Set/Get USB VID/PID.  4. Fix bug for connection to android phone USB OTG  5. Fix card removal  6. Encrypt Output: length (len<128-81XX, len<256-82XX), check Visa for 9F6B instead of Paypass, STOP response use Format4 for encryption  7. Bump firmware version to Kiosk III NEO v1.10.046 |
| Kiosk III NEO v1.10.045 | 08/11/2016 | 1. Truncate USB frame to its true length. (G)  2. Poll For Token Ex returns Status Code = 0x0A and Error Code = 0x70.(ViVOcard)  3. FWKIIISRED-45, sometimes can't read card successfully or output error card data.(ViVOcard)  4. Kiosk II - Proprietary tags for Visa  5. Delete some invalid code.  6. Amex and Discover add FF69 TLV (CS-817)  7. Bump firmware version to Kiosk III NEO v1.10.045 |
| Kiosk III NEO v1.10.044 | 08/01/2016 | 1. Encrypted Output: Only Error Code TLV and DFEE26 TLV with no card data, then not increase KSN and not show KSN in output  2. Modify peri\_buffer.h  3. Bump to Kiosk III NEO v1.10.044 |
| Kiosk III NEO v1.10.043 | 07/20/2016 | 1. FFF3 TLV B2b5(ViVOwallet support) effective to ViVotech test card  2. make DF7D setting effective  3. 2C-12(Get ATR) accept interface=0x20 to compatible KII GR129 |
| Kiosk III NEO v1.10.042 | 07/18/2016 | 1. Modify as3911 not responding error. |
| Kiosk III NEO v1.10.041 | 07/15/2016 | 1. Fix ViVOpay test card sometimes no response.  2. return 0x0c for P4T command when antenna removed in Native Mode  3. When antenna removed in Native Mode, reader is not allowed to enter PT mode.  4. when antenna is removed, reader will response 0x70 for (02-05) command  5. Bump to Kiosk III NEO v1.10.041 |
| Kiosk III NEO v1.10.040 | 07/14/2016 | 1. sometimes can't detect card.  2. Bump to Kiosk III NEO v1.10.040 |
| Kiosk III NEO v1.10.039 | 07/14/2016 | 1. when the card is present, “Set Device Configuration” command returns “Media removal” event.  2. Bump to Kiosk III NEO v1.10.039 |
| Kiosk III NEO v1.10.038 | 07/14/2016 | 1. Modify antenna removal check to 6 tries.  2. Fix issue VCPS2.1.3: CLQ.F.109.00 Cash transaction Fail.(e)  3. When antenna remove, 2c-01 command should be allowed.  4. get “Media removal” event when card is not present for each “Activate Transaction” command  5. Firmware version bump to "Kiosk III NEO v1.10.038" |
| Kiosk III NEO v1.10.037 | 07/13/2016 | 1. in Native mode, antenna removed, sent command 2c-02, reader shall return 0x0c.  2. Firmware version bump to Kiosk III NEO v1.10.037. |
| Kiosk III NEO v1.10.036 | 07/12/2016 | 1. Change antenna removal code to 0x70.  2.When Antenna absent, reader can't control led, buzzer and rf  3. PT mode send out MST message after card activated.  4. Native mode, send out MST card removed message after a delay.  5. Support 02-05 command in Auto Poll mode.  6. When Antenna absent, reader can't run 2c-xx command  7. Firmware version in Kiosk III NEO v1.10.036. |
| Kiosk III NEO v1.10.035 | 07/11/2016 | 1. Modify antenna calibration method to average values.  1. modifications per Bryce's mail on 7/9.  2. 02-01 command no response when antenna removed.  3. Erase serial number command response error.  1. 02-05 command don't support Auto Poll mode now.  1. 05-01 command response OK when in PT mode and no P4T command issued.  2. Firmware version stay in Kiosk III NEO v1.10.035. |
| Kiosk III NEO v1.10.034 | 07/08/2016 | 1. Add collision improvement.  2. During P4T command processing, if any command in, reader discard them, per KII drop 2 - 6/22  3. Modify antenna removal value to 253.  4. Modify Interac for led.  5. Modify NFC for led indicator when send and receive.  6. Correct anti-collision issue.  7. Amex and Discover-9A TLV YYMMDD, YY<=49 form year 20YY, YY>49 form year 19YY  8. Poll for token returns TIMEOUT even though card is present just opposite to the reported issue.  9. VCPS2.1.3: CLQ.F.109.00 Cash transaction Fail.  10. Add tag DFEF36 to default setting.  11. Add tag DFEF36 default setting in Group 2.  12. VCPS2.1.3: CLQ.S.001 When DF name missing in Select AID, reader should select NEXT AID  13. Set Configuration: If encryption on and set tag FFF7(Burst Mode) value is not Burst\_Off, then reader will set FFF7 as Burst\_Off, won't return error.  14. 02-05 modifications per KII drop2-6/22  15. PT mode response won't output MST tag, per KII drop2-6/22  16. MST tag bit setting modifications, per KII drop 2 - 6/22  17. Firmware version bump to Kiosk III NEO v1.10.034. |
| Kiosk III NEO v1.10.033 | 06/30/2016 | 1., P4T command.  2.Bump firmware version to Kiosk III NEO v1.10.033 |
| Kiosk III NEO v1.10.032 | 06/29/2016 | 1. 02-01 response in PT mode.  2. DFEF36 status bits error in PT mode.  3. lack of data in PT data package caused error on command 2C-03.  4. Intercard led control for other interface.  5. Bump to Kiosk III NEO v1.10.032 |
| Kiosk III NEO v1.10.031 | 06/28/2016 | 1. Add Paypass  2. Make a reboot after antenna command F8 00 00 00.  3. Bump firmware version to KIOSK III NEO v1.10.031 |
| Kiosk III NEO v1.10.030 | 06/21/2016 | 1., KioskIII - USB comms fails during Activate Transaction command.  2. Bump firmware version to KIOSK III NEO v1.10.030 |
| Kiosk III NEO v1.10.029 | 06/20/2016 | 1. Add File System test command (C7-3B) to test File System area (store DUKPT Key and Merchant data)  2. Fix Application Capability(FFF3) definition error.  3. Bump firmware version to KIOSK III NEO v1.10.029 |
| Kiosk III NEO v1.10.028 | 06/20/2016 | 1. decrease USB port send data delay time.  2. Bump firmware version to KIOSK III NEO v1.10.028 |
| Kiosk III NEO v1.10.027 | 06/16/2016 | 1. Modify antenna removal function.  2. Bump firmware version to KIOSK III NEO v1.10.027 |
| Kiosk III NEO v1.10.026 | 06/15/2016 | 1. VCPS: CID=C0, reader decline the transaction, but the error code is not correct.  2. Visa, refund, skip cvm, ttq B2b7 clear setting  3. Modify pass through collision.  4. Modify Paypass STOP command.  5. Modify antenna removal function.  6. encryption on, when transaction result fail with only 4 bytes error code (no TLV), add KSN TLV  7. Bump firmware version to KIOSK III NEO v1.10.026 |
| Kiosk III NEO v1.10.025 | 06/13/2016 | 1. Modify paypass STOP process.  2. Modify antenna removal standard.  3. Bump firmware version to KIOSK III NEO v1.10.025 |
| Kiosk III NEO v1.10.024 | 06/06/2016 | 1. Add pass through enhanced polling.  2. Bump firmware version to KIOSK III NEO v1.10.024 |
| Kiosk III NEO v1.10.023 | 06/03/2016 | 1. Visa, if transaction type is refund, skip CVM.  2. fix issue, 29-xx commands error in pass-through mode.  3. Modify jira for paypass  4.Bump firmware version to KIOSK III NEO v1.10.023 |
| Kiosk III NEO v1.10.022  Kiosk III NEO v1.20.001 | 05/30/2016 | 1. Amex: fix bug-user defined group can also set DF51 TLV  2. when no encryption flag in flash, can set it correctly  3. 81-04 Get Key Information, correct Key Information.  4. Firmware version number format changed to "Kiosk III NEO vx.yy.zzz" for Main Version  5. Kiosk III v1.10.019-MChip3-The reader's status is not correct when run one case.  6. Group 2 setting.  7. Kiosk III NEO v1.20.001----Add CUP  8. Bump firmware version to KIOSK III NEO v1.10.022 |
| Kiosk III NEO v1.10.021 | 05/26/2016 | 1. Modify log part.  2. Modify apple pay duplicate tag DF02.(G)  3. Modify LOG related issue. Enable ENABLED\_LOG.  4. reduce try again deactivate time to pass case MOBILE\_CVM\_PROC13  5. AppleyVAS: when no mechantID, AppleVAS fail, try to run SmartTap  6. fix bug in encryption output EMV mode: not clearing record flag byte  7. Kiosk III-V1.10.018-mchip3-The stop command still works when disable stop aommand(DF68=00)  8. NEO v1.10.019 passthrough timeout response error  9. cannot swipe qvSDC Terminal Test Card under Auto switch mode  10. When Cancel transaction, present any card immediately in front of the reader, the first LED is still always on.  11.Firmware version number format changed to "Kiosk III NEO vx.yy.zzz"  12. Bump firmware version to KIOSK III NEO v1.10.021 |
| Kiosk III NEO v1.10.020 | 05/20/2016 | 1. Add log. The tag is ENABLED\_LOG.  2. Bump firmware version to KIOSK III NEO v1.10.020 |
| NEO v1.10.019 | 05/19/2016 | 1. Add tag DFEF2C to indicate select terminal AID list.  2. Modify boot up notification beep length.  3. Add NEO v1.20.zzz version  4. Modify Set AID command to support Terminal AID List Tag(0xDFEF2C)  5. Amex and Discover: when transaction result is terminate, Led all off and Beeps at same time  6. CS758 issue.  7. fix bug in ApplePay VAS: when no mechantID, will not try to run SmartTap  8. fix bug in SmartTap: when error occur in SmartTap process, return status code=0x0A to indicate fail  9. There is no effect when Tag FF F3 set to 0. |
| NEO v1.10.018 | 05/17/2016 | 1. Cloned from GR-2913 (CLQ.D.008.00: Reader terminates the transaction instead of completion)  2. Use Vivopay Key loading to load Admin Key (RKI-KEK), modify 80-00, 80-01, 81-00, 81-02, 81-04, 81-0A, 83-00 commands to meet this request  3. Remove Silk2.0 Key Loading, remove C7-2F command  4. Add FF69 output.  5. Speed up pass-through process.  6. Add protect for antenna checking. |
| NEO v1.10.017 | 05/10/2016 | 1. ApplePay VAS: fix bug-when SELECT process fail, status returned should indicate the failure  2. ApplePay VAS: make AppleVAS and SmartTap use the same buffer to store data  3. SmartTap: add error code in SmartTap for future use  4. SmartTap: DF11 TLV(time stamp) should be input from ACT command  5. CS-749  6. CS-747  7. CS-751  8. CS-720  9. CS-758  10. AppleVAS: when request AppleVAS and SmartTap in ACT command, tap SmartTap, run SmartTap after AppleVAS fail  11.AppleVAS: when request AppleVAS in ACT command, AppleVAS mode is VAS & Pay , VAS or Pay, tap normal card, run normal application after AppleVAS fail.  12.AppleVAS and SmartTap: add 9F39, DF30 TLV in output data |
| NEO v1.10.016 | 04/29/2016 | 1. No response received after sending 2nd cmd immediately after the 1st cmd. |
| NEO v1.10.015 | 04/29/2016 | 1. add 9F11,9F12 into Amex Activate Transaction response |
| NEO v1.10.014 | 04/20/2016 | 1. Response format changed for Poll for token and Enhanced Poll for token.  2. Buzzer control command  3. Issuer code table Index (9F11) and Application Preferred Name (9F12) are not returned in Visa's Activate response.  4. Visa approved of IDTech producing a build in which Requirement 5.76 is skipped if the reader is used in an ATM. |
| NEO v1.10.013 | 04/18/2016 | 1. Modify USB to pass voltage test.  2. Fix Response format changed for Poll for Token and Enhanced Poll for Token. |
| NEO v1.10.012 | 04/01/2016 | 1. fix, Activate transaction hands when CUP card presented. |
| NEO v1.10.011 | 03/31/2016 | 1. fix Activate Transaction hangs when Mifare card presented.  2. fix, Activate transaction hands when CUP card presented.  3. inverse the modification in Revision 5463: Modify USB interface to let D+ in low level when not used. |
| NEO v1.10.010 | 03/21/2016 | 1. Fix bug, buffer flow |
| NEO v1.10.009 | 03/15/2016 | 1. Reverse MEEI LED Enable/Disable |
| NEO v1.10.008 | 03/09/2016 | 1.fix Amex: check 9F33 and 9F6E consistency in CVM processing, if not consistent, skip this CVM method |
| NEO v1.10.007 | 03/08/2016 | 1. fix Amex: check 9F33 and 9F6E consistency when Amount>CVM limit (to be the same as Vend3) |
| NEO v1.10.006 | 03/08/2016 | 1. add AndroidPay and ApplePay VAS version number into module version number  CL AppSpe,AndroidPaySmartTap, v1.3,,  CL AppSpe,ApplePay VAS, v1.0.8,,  2. Allow external MEEI control of LEDS |
| NEO v1.10.005 | 02/17/2016 | 1. Amex: when default, keep 9F6E-B2b6,b7 same as 9F33-B2b6,b7  2. Remove ACTOLL AID from system AID |
| NEO v1.10.004 | 01/28/2016 | 1. fix JIRA issue: Vendi-113, use transaction type(9C) to check CVM condition code  2. fix JIRA issue: Vendi-129,  (1)check 9F33 and 9F6E corresponding bit (B2b6,B2b7),  (2)Terminal is not capable of CVM processing if:(9F6E-B2b8=0 OR 9F33-B2b8=0) AND (9F6E-B2b7=0 OR 9F33-B2b7=0) AND (9F6E-B2b6=0 OR 9F33-B2b6=0) AND (9F6E-B2b5=0 OR 9F33-B2b5=0) AND 9F33-B2b4=0 |
| NEO v1.10.003 | 01/27/2016 | 1. every time check Encryption Enable Flag, retrieve it from flash first |
| NEO v1.10.002 | 01/22/2016 | 1. Add AVAS timeout output.  2. Add DFEE26 TLV and Attribution in ApplePay AVAS output |
| NEO v1.10.001 | 01/20/2016 | Encryption function modification:  1. add command "Check DUKPT Key (81-04)" to get DUKPT Key basic information  2. add command "Get DUKPT Key Serial Number (KSN) (81-0A)"  3. add command "Set Temporary Baud Rate (30-02)", baud rate will return to previous value when power up the reader  4. if encryption is on, if Account DUKPT Key not exist/exhausted, "Get Transaction Result(03-00)" command will response error code 90h/91h  5. modify: if encryption is on, check Account DUKPT Key in Activate Transaction(02-01) command  6. modify: if encryption is on, check Account DUKPT Key when AutoPoll mode before indicate present card  7. Encryption switch ON/OFF logic  (1) "Set To Default (04-09)" command will not change encryption switch status  (2) Encryption will be OFF, if not setting in flash, when power on reader  (3) If encryption is ON, set encryption to be OFF is not allowed  (4) If encryption is OFF, set encryption to be ON can only take effect when Account DUKPT Key exist and is valid, otherwise error code returned  8. If encryption is ON, Burst mode is disabled.  (1)If encryption is ON, when power up, check burst mode, if not OFF, change to OFF  (2)If encryption is ON, when setting burst mode, if setting is not OFF, response error code  (3)when encryption is setting to be ON, set burst mode to be OFF  9. correct 9F39, DF30 TLV in all application(Discover,Amex,Visa,Mastercard,Interac,ViVowallet)(fix JIRA Issues: JIANGKIOSK-253,254,255,256,257)  10. remove duplicate TLV in Mastercard output data (fix JIANGKIOSK-169 in JIRA)  11. modify Attribution byte and add DFEE26 TLV in transaction output  12. Auto Switch output is Poll For Tokenreponse, should not be encrypted  13. Encryption is on, encrypted data output format is <Attribution><TLVs>  (1) Skip if track1 TLV is not present, skip if track2 TLV is not present  (2) No clearing record flag, skip if clearing record TLV is not present  (3) Wrapped 4 bytes error code with tag FFEE1F to be TLV  (4) “Get Transaction Result (03-00)” response no data instead of 0x00,0x00,0x00, when no data need to output  ApplePay function modification  14. Modify AVAS sw1 & sw2 when no Merchant Record exists. |
| NEO v1.00.017 | 01/18/2016 | 1.Add ApplePay function |
| NEO v1.00.016 | 11/17/2015 | 1. not change encryption type in "Set to default", initialize encryption type to TDES when first use |
| NEO v1.00.015 | 11/16/2015 | 1. Delete '0xdf, 0x89, 0x1b, 0x01, 0x00,' from SetParameterDefaults() G0 buffer. |
| NEO v1.00.014 | 11/10/2015 | 1. Add internal command "Get DUKPT Key KSN (C7-38)", "Test DUKPT Key Life (C7-39)"  2. if ODA fail AND CTQ not returned, reader return error code 54h.  3. Modify Admin DUKPT Key Loading. "Load KSN" command will start timer, instead of "Get Device Status" command to start timer. Thus KIII can load Admin Key in HSM  4. Add NFC-p2p function(file Peri\_NFCP2P\_application.cpp).  5. Change L1 stack from 1000 to 600.  6. Add P2P timeout indicator.  7. Add internal command (03-22) to tell SRED/NSRED.  8. When antenna is disconnected, reader will return error status if Activate Command(02-01) received. Reader will keep beeping when antenna is disconnected.  9. Kiosk III is default in Auto Poll mode. |
| NEO v1.00.013 | 09/28/2015 | 1. Add antenna check  2. Modify function RespondActive(), auto poll output part, if form track data and transaction result data fail, won't output message  3. Modify flash layout to 1M chip based on NEO v1.00.011. |
| NEO v1.00.012 | 09/24/2015 | 1. K21 flash size changed to 1M  2. This version is based on NEO v1.00.010 |
| NEO v1.00.011 | 09/14/2015 | 1. Change buffer size in EncryptData() to 512 bytes  2. Change encrypt whole data formate to DataEn =En(DataLen+Data) in PassThrough  3. Encrypt response of PassThrough-Exchange APDU Data (2C-13)  4. Encrypt response of PassThrough-NFC Commands (2C-40)  5. Not erase Account DUKPT Key in Set to Default command (04-09)  6. Modify C7-35 intertal command to "Set to default and erase DUKPT Key"  7. Add Android Pay(Softcard) function  8. Fix issue in EncryptedDataDeal(), if fail to parse TLV format, turn to encrypt the whole data  9. Enlarge Paypass Output buffer from 2048 to 4080 bytes.  10. merge buffer "lucmEnSource" with "lucmCommand" in RespondActive()  11. Not erase KPK in Set to Default command  12. visa error codes change, for KII changed design.  13. DPAS: clear activate command buffer when transaction finished  14. Amex: clear activate command buffer when transaction finished  15. Check KSN not be all zero in Key Loading  16. Key Loading timeout use OSGetTime()  17. Add data encryption for AutoSwitch  18. Clear Active command buffer after data output.  19. Fix bug in Key Management Command(C7- 2D~37),  input CmdFrame[]: <CMD><Sub-CMD><Data>  20. Key loading: new KPK need not compare with exist KPK, because new KPK will replace exist KPK  21. Make timeout output with no other data in pass-through mode.  22. Modify timeout error for activate command in auto poll mode. Paypass. |
| NEO v1.00.010 | 07/21/2015 | 1. Check Date and Time in Activate Transaction command |
| NEO v1.00.009 | 07/20/2015 | 1. erase serial number command |
| NEO v1.00.008 | 07/17/2015 | 1. Tamper initialize |
| NEO v1.00.007 | 07/16/2015 | 1. when load Admin Key timeout, clear DataFrame in InitDiagnosticsHandler()  2. Fix bug JIANGKIOSK-233, incomplete mainApp image caused boot fail.  3. Change USB descriptor, 'ViVOtech' -> 'ID TECH' |
| NEO v1.00.006 | 07/08/2015 | 1. not check KeyUsage in ViVopay Load DUKPT Account Key (81-00) command, for HSM always set KeyUsage to 'P0' |
| NEO v1.00.005 | 07/07/2015 | 1. tamper key setting |
| NEO v1.00.004 | 07/06/2015 | 1. Add FFEE01 tag to Paypass, JIANGKIOSK-232 |
| NEO v1.00.003 | 07/06/2015 | 1. Visa 9F03 handling, JIANGKIOSK-230 |
| NEO v1.00.002 | 07/03/2015 | 1. fix issue in SetSN() when save serial number to flash |
| NEO v1.00.001 | 07/02/2015 | Update firmware version as follows:  1.29-00 (Full Version)  NEO v1.00.001  2.09-03 (Main Version)  NEO v1.00  3.09-20 (Module Version)  FW,Kiosk III v1.00  CommonIF v1.00,,  CL AID,MasterCardPayPass M/Chip 3.0.2, Kiosk III v1.00,,  CL AID,Visa VCPS 2.1.3, 1.00,,  CL AID,AmexExpressPay 3.0, v1.00,,  CL AID,Discover DPAS 1.0 Zip 3.1.2, 80136120 Rev.A,,  CL AID,Interac 1.5, Kiosk III v1.00  CL L1,EMV 4.3 L1, v1.00 |

Note:

1. Support device: Kiosk III NSRED
2. Interface Supported: USB-HID /RS232
3. Released files: none
4. Support platform: none
5. Install package: none
6. Project File: none
7. How To Build Code: IAR Embedded Workbench7.10
8. Change List: Refer to the table above.
9. Special Requirement: none