No	Item No.	File Name	Release Date	Device	Country	Comm. Protocol
		Commentary				
1	**BB-ZA1171**	FL-ZA5AAJ1-2.71-BB.hex	09/13/12	BB	South Africa	CCNET

1. Processing of new 10ZAR, 20ZAR, 50ZAR, 100ZAR and 200 ZAR to be issued in 2012 has been introduced.
2. DIP switch to enable/disable old ZAR acceptance has been brought in.

| 2 | **BB-ZA1170** | FL-ZA5AAJ1-2.70-BB.hex | 06/30/11 | BB | South Africa | CCNET |

1. Processing of the stained bills has been improved based on the latest samples of stained notes.
2. Overall acceptance rate has been improved according to the latest samples of street grade bills.
3. BB statistics in new format has been introduced.
4. Processing of EMPTY DISPENSER command has been modified to prevent false credit report in non-applicable states.
5. During packing BB tries to reject a bill rather than reports one of the following errors: A8, B5, C2 or E5.
This modification allows to prevent jams inside BB switch.

| 3 | **BB-ZA1163** | FL-ZA5AAJ1-2.63-BB.hex | 06/15/10 | BB | South Africa | CCNET |

1. Processing of old 200 ZAR has been disabled.
2. Barcode is prohibited to be stacked to the recycling cassette.
3. BB suspends dispensing and reports BOX REMOVED if drop box was removed over dispensing; BB will resume dispensing after drop box replacement.
4. Point of reporting "Waiting for bills to be removed" (0x1D 0x01) state during dispensing has been changed from the moment when BB starts moving the last bill to be dispensed from recycling cassette to dispenser to the moment when the last bill to be dispensed enters the dispenser.
5. Diagnostic has been introduced.
6. FEED LEVEL capability has been introduced.
7. Commands SET CASSETTE CAPACITY LIMIT and GET CASSETTE CAPACITY LIMIT have been added to CCNET.

| 4 | **BB-ZA1153** | FL-ZA5AAJ1-1.53-BB.hex | 03/09/07 | BB | South Africa | CCNET |

1. Acceptance of new 20 ZAR has been improved based on the latest samples of street grade bills.
2. BB turns to IDLING through chassis reinitialization after the following sequence: drop box removal, chassis removal, then chassis replacement and drop box replacement.
3. The keeping of correct BB statistics has been brought in (failure counters).
4. The improved algorithm of drop box initialization has been implemented in order to make sure that BB is always able to determine if drop box is completely attached.

| 5 | **BB-ZA1152** | FL-ZA5AAJ1-1.52-BB.hex | 10/03/06 | BB | South Africa | CCNET |

First release:
1. Metal bezel support.
2. Barcode recognition.
3. Jam (credit loss) prevention.
4. Chassis soft download via CCNET.
5. Improved short bill returning.
6. Pass sensor's processing during bill packing has been improved to prevent rejection of single bills.
7. 'SET OPTIONS' and 'GET OPTIONS' commands have been added to CCNET.
8. Processing of the following options has been implemented:

Commentary

'LED BV INHIBIT' -> 0 - LED is red in BV_INHIBIT state; 1 - LED is turned off

'KEEP BILL' -> 0 - bill will be dropped after returning;1 - bill will be held

'LOOK TAPE' -> enhanced processing of pass sensor (0 - OFF, 1 - ON)

'TURN SWITCH' -> switch turning after bill packing (0 - OFF, 1 - ON)

9. Loss of cassette setting "Not Assigned" after RESET has been eliminated.

10. Control of triangle wheel in metal bezel during bill accepting has been
    improved to prevent the bill sticking.

11. Control of thermo heater in metal dispenser has been added.

12. Enhance the algorithm of BB self-testing: if cassette(s) is(are) removed,
    software has to skip the algorithm of "device recovery after POWER DOWN"
    and turn to the regular self-testing.

13. Set higher priority to the indication of "BOX REMOVED" state.

14. Make "RECYCLING CASSETTE STATUS" request accessible only in IDLING,
    DISABLED, ESCROW states (according to "CashCode NET" description).

15. Do not erase an IDENTIFICATION NUMBER of BB unit in statistics after
    download to the validating head the software designed for another country.

16. BB power recovery feature has been introduced.

17. Nonvolatile counters for counting all dispensed or unloaded bills have been
    added.

18. Commands "POWER RECOVERY", "EMPTY DISPENSER", "EXTENDED CASSETTE STATUS"
    have been included to CCNET.

19. Size of the transparent window on the banknote has been brought in to be
    taken into account during transporting of the bill.

20. Errors related to setting date/time from B2B keypad in Service mode
    have been fixed.

21. The following error has been fixed: if remove a cassette from the chassis
    BB keeps trying to pack bills to that cassette.

22. "GET STATUS" command is enable only in IDLING and DISABLED states
    according to CCNET specification.

23. Error with displaying of "Not Assigned" state for recycling cassettes
    in Service mode has been fixed.

24. Prohibit switching to download mode in the following error states:
    ERROR_LINK_SENS_HV, ERROR_MAGN_SENS_HV and ERROR_OPT_SENS_HV.

25. Prohibit performing software RESET in the following error states:
    ERROR_LINK_SENS_HV, ERROR_MAGN_SENS_HV and ERROR_OPT_SENS_HV.

26. Add "READ BB-DEVICES SERIAL NUMBER" command to CCNET.

27. Remove the control of stand-by battery.

28. Fix for unload in case when some bills were manually removed from
    the cassette.