

### VC 80 OPERATING SYSTEM MAINTENANCE RELEASE 2 (01.02.00) RELEASE NOTES

### INTRODUCTION

Whether your material handling vehicle operators are moving incoming shipments in a warehouse into inventory, containers on and off ships and trains or baggage to and from departing and arriving planes, you need to achieve maximum throughput and accuracy. With the VC80, you will.

With full Windows support, the data your operators need to complete tasks faster and more accurately is always at their fingertips. The rugged design built to handle all day vibrations, pounding and your toughest indoor and outdoor environments including the freezer. With its compact design and flexible mounting options, the VC80 will fit easily your vehicles – even in the most space constrained forklifts, clamp trucks, yard mules and more.

When it comes to adding the features your workers need to maximize productivity, we make it easy, with all the ports you need to add bar code scanners, mobile printers, a push-to-talk microphone and more. You get plenty of power to deliver blazing performance on the most graphics-intensive applications, paving the way to upgrade your green screen apps to a more modern interface. Your workers can expect true wired-line style wireless performance with support for 802.11a/b/g/n/ac plus your choice of internal or external antennas. The display is easy to see – even outdoors. The touch screen's soft keyboard and vibration feedback are designed for use with even the thickest gloves. Do your workers prefer a keyboard? No problem — we offer optional keyboards that can be mounted on the bottom or side of the VC80. And in the event of damage, you can replace the touch screen – the most frequently damaged component – on site, no need for a trip to the service depot.

The VC80 – real desktop power designed for all your material handling vehicles.

### DESCRIPTION

VC80 Maintenance Release 2 rev. 010200 (VC80 MR2), includes the following:

1. Updates to VC80 OS images:

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- WLAN driver upgraded to rev. 6.223.274.9 resolving remaining regulatory issues by using correct channel sets for particular countries;
- Bluetooth driver is upgraded to rev. 6.5.1.6930 resolving several BT stack and Control Panel configuration issues;
- Upgraded all Zebra printer-related software;
- Installed Zebra Scanner SDK and SMS;
- VC Control Panel upgraded to rev. 4.10.44029.0 which now includes:
- 1. Extended VC Control Panel revision is displayed on System Information page now. The 5-digit number uniquely identifies the software and it is used in part number now;
- 2. Accelerometer sensor data and events logging added for analytics. Accelerometerbased Screen Blanking still is not supported in this Release;
- 3. "WiFi Reconnect Service" minimizing occasional WLAN reconnection delays when VC80 temporary goes out of WiFi coverage;
- 4. "VC Kiosk" Application and Desktop shortcut to launch Kiosk Control Panel;
- 5. New Bezel Keyboard key implementation keeps cursor in the entry field when My-T-Soft SIP is started or was hidden and then restored back on the screen;
- 6. Improved persistency of Debug Logging settings, EC and Accelerometer debug and data logging;
- 7. Screen Blanking hides minimised My-T-Soft SIP icon now;
- 8. Changed Bezel Keyboard scan codes are applied right away and does not require reboot now;
- 9. Provided compatibility with 3rd-Party applications like SOTI Client;
- 10. Low battery notification message displays estimated remaining run time on UPS battery.
- 11. UPS Battery Charge current is shown as positive value and Discharge current as negative value now;
- 12. Grey status icon is displayed and "Start Test" button is disabled now for all non-Freezer SKUs where Touch Panel Heater is not present;
- 13. Correct software revisions displayed in OS Details list, except Zebra Font Downloader and Zebra Status Monitor (revisions not available and displayed as empty strings);
- 14. Adds few minor improvements to VC Control Panel User Interface;
- VC80 BIOS rev. 1.3.11:
- 1. Has Accelerometer sensor enabled now;
- 2. Supports "Preboot eXecution Environment" (PXE) for remote OS imaging procedures;
- VC80 Embedded Controller rev. 1.3.10:
- 1. Added Heater Control support for Freezer SKU;
- 2. VC80 Bezel "+" and "-" keys are used to adjust Display Brightness and Internal Speaker Volume only and can not be re-mapped.
- 3. External "+5V" power output on serial ports is switched OFF in Sleep mode and is ON again after OS is up and running already;
- 4. Ignition ON and OFF events wake up VC80 from Sleep mode now;
- 5. Fixed several defects in power ON sequence at normal and -30C temperature and debug printing procedure.



2. Created new VC80 Software Package zip file 80X0WXXXENZP010200.zip, including:

- Zebra Technologies EULA license.txt file;
- BIOS 80X0XXXXENBS010311.bin image and BS010311.nsh BIOS installation batch file for UEFI shell;
- EC 80X0XXXXENCF010310.bin image and CF010310.nsh EC installation batch file for UEFI shell;
- New VC Control Panels installable image 80X0XXXXENCL044029.exe;
- EC firmware update utility ifu.efi (used in CF010310.nsh batch file);
- VC80 Software Update Procedure document rev. 010200.

### CONTENTS

File	Description
8020WE7XENOS010204.iso	Windows 7 Professional for Embedded Systems 64- bit OS Clonezilla Bootable Recovery USB Flash drive image
8020WS7XENOS010204.iso	Windows Embedded Standard 7 Entry 64-bit OS Clonezilla Bootable Recovery USB Flash drive image
80X0XXXXENCL044029.exe	VC Control Panel installable image. Included into both OS images and VC Software Package file.
80X0XXXXENCF010310.bin	VC Embedded Controller Firmware image. OS- independent. Requires UEFI-based tool to install.
80X0XXXXENBS010311.bin	VC80 AMI BIOS image. Does not include OEM 2.1 Activation. Requires UEFI-based tool to install.
80X0WXXXENZP010200.zip	VC Control Panel Installer image; BIOS image and installation batch file; EC image, installation utility, batch file and procedure; Zebra license file. The package is compatible with OS images revisions 0102XX and back-compatible with OS Rev. A (010103) and MR1 (010105).



### DEVICE COMPATIBILITY

BIOS and Embedded Controller firmware are pre-installed on all SKUs at the Factory. SKUs with Windows 7 Professional OS require BIOS to be "OEM 2.1 Activated" at the Factory.

This software release has been approved for use with the following VC80 SKUs:

VC80 SKU Details	Approved SKU Code
10" (1024 x 768), Standard (-30 - +50 C, Non-Condensing Environments), Standard Display, Intel E3825 Dual Core, 1.33 GHz, 1 MB Cache, 2 GB RAM, 32 GB SSD, No Operating System, No Software, Basic IO, internal antennas	VC8010SSAA00AAAAXX
10" (1024 x 768), Standard (-30 - +50 C, Non-Condensing Environments), Standard Display, Intel E3825 Dual Core, 1.33 GHz, 1 MB Cache, 2 GB RAM, 32 GB SSD, Windows Embedded Standard 7, English, TekTerm, Basic IO, internal antennas	VC8010SSAA11CAAAXX
10" (1024 x 768), Standard (-30 - +50 C, Non-Condensing Environments), Standard Display, Intel E3825 Dual Core, 1.33 GHz, 1 MB Cache, 2 GB RAM, 32 GB SSD, Windows Embedded Standard 7, English, TekTerm, Basic IO, connectors for external antennas	VC8010SSAA11CABAXX
10" (1024 x 768), Standard (-30 - +50 C, Non-Condensing Environments), Standard Display, Intel E3845 Quad Core, 1.91 GHz, 2 MB Cache, 4 GB RAM, 64 GB SSD, Windows 7 Professional for Embedded Systems, English, TekTerm, Basic IO plus CAN-Bus, internal antennas	VC8010SSBB21CCAAXX

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10" (1024 x 768), Standard (-30 - +50 C, Non-Condensing Environments), Standard Display, Intel E3845 Quad Core, 1.91 GHz, 2 MB Cache, 4 GB RAM, 64 GB SSD, Windows 7 Professional for Embedded Systems, English, TekTerm, Basic IO plus CAN-Bus, connectors for external antennas	VC8010SSBB21CCBAXX
10" (1024 x 768), Standard (-30 - +50 C, Non-Condensing Environments), Outdoor Readable Display, Intel E3825 Dual Core, 1.33 GHz, 1 MB Cache, 2 GB RAM, 32 GB SSD, Windows Embedded Standard 7, English, TekTerm, Basic IO, connectors for external antennas	VC8010SOAA11CABAXX
10" (1024 x 768), Standard (-30 - +50 C, Non-Condensing Environments), Outdoor Readable Display, Intel E3845 Quad Core, 1.91 GHz, 2 MB Cache, 4 GB RAM, 64 GB SSD, Windows 7 Professional for Embedded Systems, English, TekTerm, Basic IO plus CAN-Bus, connectors for external antennas, GPS	
10" (1024 x 768), Standard (-30 - +50 C, Non-Condensing Environments), Standard Display, Intel E3825 Dual Core, 1.33 GHz, 1 MB Cache, 2 GB RAM, 32 GB SSD, Windows Embedded Standard 7, English, TekTerm, Basic IO plus Ethernet, internal antennas	VC8010SSAA11CBAAXX
10" (1024 x 768), Freezer (-30 - +50 C, Condensing Environments), Standard Display, Intel E3825 Dual Core, 1.33 GHz, 1 MB Cache, 2 GB RAM, 32 GB SSD, Windows Embedded Standard 7, English, TekTerm, Basic IO, internal antennas	VC8010FSAA11CAAAXX
10" (1024 x 768), Standard (-30 - +50 C, Non-Condensing Environments), Standard Display, Intel E3845 Quad Core, 1.91 GHz, 2 MB Cache, 4 GB RAM, 64 GB SSD, Windows 7 Professional for Embedded Systems, English, TekTerm, Basic IO plus Ethernet, connectors for external antennas	VC8010SSBB21CBBAXX



Software revisions used in the MR2 release are listed in the table below. Changes from MR1 are highlighted in **Bold**.

VC Control Panel	4.10.44029.0
BIOS	1.3.11
Embedded Controller	1.3.10
Broadcom WLAN	6.223.274.9
Broadcom BT driver and	
stack	6.5.1.6930
Zebra Designer	2.50.9384
Zebra Printer Setup utilities	1.1.9.1187
Zebra Font Downloader	3.1.1.9355
Zebra Printer Status Monitor	5.1.7
Zebra Firmware	
Downloader	3.0.1.27
Zebra Scanner SDK	3.00.0002
Zebra CoreScanner driver	3.00.0003
Zebra SMS	3.00.0004
Microsoft Visual C++ 2013 x64	12.0.30501.0
Microsoft .NET framework	4.61
Mozila Firefox Browser	46.0.1.5966
IBM Java JVM	8.0.910.15
Intel E3800 Chipset drivers	10.1.1.27
Intel Breeseer Crephice	37.15.0.1210
Intel Processor Graphics	57.15.0.1210
Intel E3800 SOC IO Drivers	1.1.8.0623
Intel E3800 SOC IO Drivers	
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for	1.1.8.0623
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80	1.1.8.0623
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for	1.1.8.0623 6.0.1.7329
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80	1.1.8.0623 6.0.1.7329
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver	1.1.8.0623 6.0.1.7329
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver Touch Base Touch Panel	1.1.8.0623 6.0.1.7329 7.92.115.2015
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver Touch Base Touch Panel	1.1.8.0623 6.0.1.7329 7.92.115.2015
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver Touch Base Touch Panel driver	1.1.8.0623 6.0.1.7329 7.92.115.2015 05.00.02-0346
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver Touch Base Touch Panel driver U-blox Sensor driver	1.1.8.0623 6.0.1.7329 7.92.115.2015 05.00.02-0346 2.21
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver Touch Base Touch Panel driver	1.1.8.0623 6.0.1.7329 7.92.115.2015 05.00.02-0346
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver Touch Base Touch Panel driver U-blox Sensor driver U-blox USB Ports driver	1.1.8.0623 6.0.1.7329 7.92.115.2015 05.00.02-0346 2.21
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver Touch Base Touch Panel driver U-blox Sensor driver U-blox USB Ports driver U-blox U-Center Demo	1.1.8.0623 6.0.1.7329 7.92.115.2015 05.00.02-0346 2.21 1.2.08
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver Touch Base Touch Panel driver U-blox Sensor driver U-blox USB Ports driver	1.1.8.0623   6.0.1.7329   7.92.115.2015   05.00.02-0346   2.21
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver Touch Base Touch Panel driver U-blox Sensor driver U-blox USB Ports driver U-blox U-Center Demo Application	1.1.8.0623   6.0.1.7329   7.92.115.2015   05.00.02-0346   2.21   1.2.08   2.18
Intel E3800 SOC IO Drivers Realtek Audio Codec driver for VC80 Realtek Gigabit Ethernet driver Touch Base Touch Panel driver U-blox Sensor driver U-blox USB Ports driver U-blox U-Center Demo	1.1.8.0623 6.0.1.7329 7.92.115.2015 05.00.02-0346 2.21 1.2.08



### INSTALLATION REQUIREMENTS

BIOS, EC and VC Control Panel software installation procedures are provided in the VC Software Package and are fully supported by Zebra Help Desk.

### INSTALLATION INSTRUCTIONS

OS installation Procedure

In order to prepare a bootable USB drive with VC80 OS image, the following is required:

USB keyboard

USB flash drive at least 16GB. Please format the drive using FAT32 file system before using it.

Download latest revision of Tuxboot tool from <u>SourceForge</u> **Create a bootable USB drive with VC80 OS image.** Start Tuxboot.

- Step 1 Select Pre Downloaded.
- Step 2 Select ISO file format.
- Step 3 Select the VC80 ISO file you have downloaded
- Step 4 Select the USB drive

Press OK

This will take time to create, duration depends on the speed of your USB drive.

#### Restore OS image

1. Connect this USB driver you created above to your VC80 and the USB keyboard.

2. The VC80 will boot from the USB drive automatically.

3. On Clonezilla Live start menu screen (with "Clonezilla live (Default settings, VGA 800x600)" option selected), press ENTER to start.

4. When prompted with 2 messages like "Are you sure you want to continue? (y/n)". Press Y for both.



- 5. When the restore is completed, press ENTER to continue.
- 6. Select "power off" option from the final menu and press ENTER.

### PART NUMBER

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