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RV700 1.8 SECURITY WHITE PAPER

REVIEWERS (COMPLETE THE TABLE BELOW. ADD ROWS AS NEEDED FOR ADDITIONAL REVIEWERS.)			
FUNCTION	NAME	REVIEW/SIGNATURE	DATE
Product Security Engineer (PSE) or equivalent	Courtney Hammond	Author	D*
Marketing/Communications	Melissa Stancato	Reviewer	D*
Quality Representative	Rohit Kale	Reviewer	D*
Software Lead	Allen Hart	Reviewer	D*
Product Security Engineer	Kalla Sturonas	Reviewer	D*
Sr. Director, Software	Aditya Dalvi	Approver (D*)	D*

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Product Security White Paper

Baxter Healthcare is committed to protecting the security of our products and the data privacy of our customers. We strive to maintain and improve the security of our devices throughout the product lifecycle, including:

- Security by Design
- Security risk management
- Secure coding
- Security scanning and testing
- Responsible vulnerability disclosure processes
- Vulnerability and threat monitoring
- Security patch management
- Incident response
- Information sharing

Baxter Healthcare maintains continued vigilance for cybersecurity threats and vulnerabilities affecting our products and services. We are dedicated to ensuring that our customers receive information related to these threats, vulnerabilities, and actions to maintain the integrity of our products and the protection of patient data. In order to fulfill these commitments, Baxter Healthcare maintains a global Product Security program focused on designing security best practices into our products and maintaining secure operations throughout our product's lifecycle.

Effective security management is a shared responsibility. Our product literature and support teams provide recommended network settings and configurations to enable proper and secure connectivity. We advise customers to conduct a hazards analysis pursuant to ISO/IEC 80001 Application of Risk Management for IT-networks Incorporating Medical Devices prior to deployment in order to identify and remedy any interoperability issues.

If you would like to report a potential product related privacy or security issue (incident, breach or vulnerability), please contact Baxter - 4321 State Street Rd, PO Box 220 Skaneateles Falls, NY 13153-0220 or visit [Product Security | Baxter](https://www.baxter.com/product-security) at <https://www.baxter.com/product-security>.

The purpose of this document is to detail how Baxter security and privacy practices have been applied to the RV700, what you should know about maintaining security of this product and how we can partner with you to ensure security throughout this product's lifecycle.

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1 Product Description

The Welch Allyn RetinaVue 700 Imager (RV700) is a high-resolution ophthalmic camera used to acquire, save and transmit digital images of the human eye. Anterior and posterior ocular structures such as the surface of the eye, cornea, and fundus including retina, macula and optic disc can be imaged. It is a prescription use only medical device.

2 Hardware Specifications

- RV 700 Display: LCD Touch Screen Monitor – 4.3 inch
- Micro USB Port
- Speaker
- Standard Capacity Rechargeable Lithium-Ion Battery: 7.2V / 3200 mAh
- High-Capacity Rechargeable Lithium-Ion Battery: 7.2V / 6400 mAh
- Wireless Connectivity - 2.4GHz/5GHz, 802.11a/b/g/n Wi-Fi module
- Camera: 2592 x 1944 pixels (5MP)
- AC Power Supply

3 Operating Systems

Texas Instruments: Linux Kernel 4.9.41

4 Third-party Software

Component Name	Version	Type
alsa-conf, alsa-conf-base	1.1.2-r0	Miscellaneous Files
alsa-lib	1.1.2-r0	Library
alsa-states	0.2.0-r5.arago0	Library
alsa-utils, alsa-utils-aconnect, alsa-utils-alsactl, alsa-utils-alsaloop, alsa-utils-alsamixer, alsa-utils-alsatplg, alsa-utils-alsaucm, alsa-utils-amixer, alsa-utils-aplay, alsa-utils-aseqdump, alsa-utils-aseqnet, alsa-utils-iecset, alsa-utils-midi, alsa-utils-speakertest	1.1.2-r0	App
azure-storage-cpp-lite	1.1.1-r0	Library
base-files	3.0.14-r89.arago4.wa2	Miscellaneous Files
base-passwd	3.5.29-r0	Miscellaneous Files
bash	3.2.57-r0.arago0	App
bc	1.06-r3	App
binutils	linaro-2.27-r2016.10	App
busybox, busybox-hwclock, busybox-udhcpc	1.24.1-r0.arago21.tisd0.wa2	App
bzip2	1.0.6-r5	App
ca-certificates	20160104-r0.wa1	Certificates
cmem-mod	4.14.00.00+git0+b514a99ac4-r7b	Library

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Component Name	Version	Type
cryptodev-module	1.8-r0.arago1	Library
curl	7.54.1-r0.wa0	App
dbus-1	1.10.10-r0.arago1	App/Library
dosfstools	4.0-r0	App
e2fsprogs, e2fsprogs-badblocks, e2fsprogs-e2fsck, e2fsprogs-mke2fs	1.43-r1	App
emmc	1.0-v1.60.00-A0007	App
ethtool	4.6-r0	App
flex	2.6.0-r0	App
funduscomms-bin	1.0-wa3	App
fw-newmar	1.0-2.00.02.A0001	App
gawk	4.1.3-r0	App
gdbm	1.8.3-r4	App
glib-networking	2.48.2-r0	Library
goodix-fw	1.0.0.0-r0	App
gststreamer1.0	1.8.3-r0	App
gststreamer1.0-libav	1.8.3-r0	Library
gststreamer1.0-plugins-bad, gststreamer1.0-plugins-bad-accurip, gststreamer1.0-plugins-bad-adpcmdec, gststreamer1.0-plugins-bad-adpcmenc, gststreamer1.0-plugins-bad-aiff, gststreamer1.0-plugins-bad-asfmux, gststreamer1.0-plugins-bad-audiofxbad, gststreamer1.0-plugins-bad-audiomixer, gststreamer1.0-plugins-bad-audiovisualizers, gststreamer1.0-plugins-bad-autoconvert, gststreamer1.0-plugins-bad-bayer, gststreamer1.0-plugins-bad-camerabin2, gststreamer1.0-plugins-bad-coloreffects, gststreamer1.0-plugins-bad-compositor, gststreamer1.0-plugins-bad-dataurisrc, gststreamer1.0-plugins-bad-debugutilsbad, gststreamer1.0-plugins-bad-decklink, gststreamer1.0-plugins-bad-dvb, gststreamer1.0-plugins-bad-dvbsuboverlay, gststreamer1.0-plugins-bad-dvdspe, gststreamer1.0-plugins-bad-faad, gststreamer1.0-plugins-bad-fbdevsink, gststreamer1.0-plugins-bad-festival, gststreamer1.0-plugins-bad-fieldanalysis, gststreamer1.0-plugins-bad-freeverb, gststreamer1.0-plugins-bad-frei0r, gststreamer1.0-plugins-bad-gaudieffects, gststreamer1.0-plugins-bad-gdp, gststreamer1.0-plugins-bad-geometrictransform, gststreamer1.0-plugins-bad-id3tag, gststreamer1.0-plugins-bad-inter, gststreamer1.0-plugins-bad-interlace, gststreamer1.0-plugins-bad-ivfparse, gststreamer1.0-plugins-bad-ivtc, gststreamer1.0-plugins-bad-jp2kdecimator, gststreamer1.0-plugins-bad-jpegformat, gststreamer1.0-plugins-bad-kmssink, gststreamer1.0-plugins-bad-meta, gststreamer1.0-plugins-bad-midi, gststreamer1.0-plugins-bad-mpegpsdemux, gststreamer1.0-plugins-bad-mpegpsmux, gststreamer1.0-plugins-bad-mpegtsdemux, gststreamer1.0-plugins-bad-mpegtsmux, gststreamer1.0-plugins-bad-mxf, gststreamer1.0-plugins-bad-netsim, gststreamer1.0-plugins-bad-pcapparse, gststreamer1.0-plugins-bad-pnm, gststreamer1.0-plugins-bad-rawparse,	1.8.3-r5	Library

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Component Name	Version	Type
gststreamer1.0-plugins-bad-removesilence, gststreamer1.0-plugins-bad-rfbsrc, gststreamer1.0-plugins-bad-rtpnvif, gststreamer1.0-plugins-bad-sdpelenc, gststreamer1.0-plugins-bad-segmentclip, gststreamer1.0-plugins-bad-shm, gststreamer1.0-plugins-bad-siren, gststreamer1.0-plugins-bad-smooth, gststreamer1.0-plugins-bad-speed, gststreamer1.0-plugins-bad-stereo, gststreamer1.0-plugins-bad-subenc, gststreamer1.0-plugins-bad-vcsrc, gststreamer1.0-plugins-bad-videofiltersbad, gststreamer1.0-plugins-bad-videoframe-audiolevel, gststreamer1.0-plugins-bad-videoparsersbad, gststreamer1.0-plugins-bad-videosignal, gststreamer1.0-plugins-bad-vmnc, gststreamer1.0-plugins-bad-waylandsink, gststreamer1.0-plugins-bad-y4mdec, gststreamer1.0-plugins-bad-yadif		
gststreamer1.0-plugins-base, gststreamer1.0-plugins-base-adder, gststreamer1.0-plugins-base-alsa, gststreamer1.0-plugins-base-app, gststreamer1.0-plugins-base-apps, gststreamer1.0-plugins-base-audioconvert, gststreamer1.0-plugins-base-audiorate, gststreamer1.0-plugins-base-audioresample, gststreamer1.0-plugins-base-audiotestsrc, gststreamer1.0-plugins-base-encodebin, gststreamer1.0-plugins-base-gio, gststreamer1.0-plugins-base-ivorbisdec, gststreamer1.0-plugins-base-meta, gststreamer1.0-plugins-base-ogg, gststreamer1.0-plugins-base-pango, gststreamer1.0-plugins-base-playback, gststreamer1.0-plugins-base-subparse, gststreamer1.0-plugins-base-tcp, gststreamer1.0-plugins-base-theora, gststreamer1.0-plugins-base-typefindfunctions, gststreamer1.0-plugins-base-videoconvert, gststreamer1.0-plugins-base-videorate, gststreamer1.0-plugins-base-videoscale, gststreamer1.0-plugins-base-videotestsrc, gststreamer1.0-plugins-base-volume, gststreamer1.0-plugins-base-vorbis	1.8.3-r0.arago0.wa0	Library
gststreamer1.0-plugins-ducati	git-r2.26	Library
gststreamer1.0-plugins-good, gststreamer1.0-plugins-good-alaw, gststreamer1.0-plugins-good-alpha, gststreamer1.0-plugins-good-alphacolor, gststreamer1.0-plugins-good-apetag, gststreamer1.0-plugins-good-audiofx, gststreamer1.0-plugins-good-audioparsers, gststreamer1.0-plugins-good-auparse, gststreamer1.0-plugins-good-autodetect, gststreamer1.0-plugins-good-avi, gststreamer1.0-plugins-good-cairo, gststreamer1.0-plugins-good-cutter, gststreamer1.0-plugins-good-debug, gststreamer1.0-plugins-good-deinterlace, gststreamer1.0-plugins-good-dtmf, gststreamer1.0-plugins-good-effectv, gststreamer1.0-plugins-good-equalizer, gststreamer1.0-plugins-good-flac, gststreamer1.0-plugins-good-flv, gststreamer1.0-plugins-good-flxdec, gststreamer1.0-plugins-good-gdkpixbuf, gststreamer1.0-plugins-good-goom, gststreamer1.0-plugins-good-goom2k1, gststreamer1.0-plugins-good-icydemux, gststreamer1.0-plugins-good-id3demux, gststreamer1.0-plugins-good-imagefreeze, gststreamer1.0-plugins-good-interleave, gststreamer1.0-plugins-good-isomp4, gststreamer1.0-plugins-good-jpeg, gststreamer1.0-plugins-good-level, gststreamer1.0-plugins-good-matroska,	1.8.3-r0	Library

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Component Name	Version	Type
gststreamer1.0-plugins-good-meta, gststreamer1.0-plugins-good-mulaw, gststreamer1.0-plugins-good-multifile, gststreamer1.0-plugins-good-multipart, gststreamer1.0-plugins-good-navigationtest, gststreamer1.0-plugins-good-ossaudio, gststreamer1.0-plugins-good-png, gststreamer1.0-plugins-good-pulse, gststreamer1.0-plugins-good-replaygain, gststreamer1.0-plugins-good-rtp, gststreamer1.0-plugins-good-rtpmanager, gststreamer1.0-plugins-good-rtsp, gststreamer1.0-plugins-good-shapewipe, gststreamer1.0-plugins-good-smppte, gststreamer1.0-plugins-good-souphttpsrc, gststreamer1.0-plugins-good-spectrum, gststreamer1.0-plugins-good-speex, gststreamer1.0-plugins-good-taglib, gststreamer1.0-plugins-good-udp, gststreamer1.0-plugins-good-video4linux2, gststreamer1.0-plugins-good-videobox, gststreamer1.0-plugins-good-videocrop, gststreamer1.0-plugins-good-videofilter, gststreamer1.0-plugins-good-videomixer, gststreamer1.0-plugins-good-wavenc, gststreamer1.0-plugins-good-wavparse, gststreamer1.0-plugins-good-y4menc		
i2c-tools	3.1.2-r0	App
imagequality-bin	1.0-wa3	App
init-ifupdown	1.0-r7.arago1.tisdk2	App
initscripts-functions	1.0-r155	App
iperf	2.0.5-r0	App
ipumm-fw	3.00.13.00-r5	App
kbd	2.0.3-r0	App
kbd-consolefonts, kbd-keymaps	2.0.3-r0	Miscellaneous Files
kernel-4.9.41-gdff5be9231, kernel-devicetree, kernel-image-4.9.41-gdff5be9231, kernel-image-uimage-4.9.41-gdff5be9231, kernel-image-zimage-4.9.41-gdff5be9231, kernel-module-8021q, kernel-module-ablk-helper, kernel-module-act-csum, kernel-module-act-gact, kernel-module-act-ipt, kernel-module-act-mirred, kernel-module-act-nat, kernel-module-act-pedit, kernel-module-act-police, kernel-module-act-simple, kernel-module-act-skbedit, kernel-module-adv7180, kernel-module-aes-arm, kernel-module-aes-arm-bs, kernel-module-aes-arm-ce, kernel-module-af-alg, kernel-module-af-key, kernel-module-ah4, kernel-module-algif-hash, kernel-module-algif-skcipher, kernel-module-am35x, kernel-module-arc4, kernel-module-arp-tables, kernel-module-arpt-mangle, kernel-module-arptable-filter, kernel-module-authenc, kernel-module-authencesn, kernel-module-axp20x, kernel-module-axp20x-i2c, kernel-module-axp20x-usb-power, kernel-module-br-netfilter, kernel-module-brcmfmac, kernel-module-brcmutil, kernel-module-bridge, kernel-module-capsule-loader, kernel-module-ccm, kernel-module-cdrom, kernel-module-cfg80211, kernel-module-cifs, kernel-module-cls-basic, kernel-module-cls-flow, kernel-module-cls-fw, kernel-module-cls-route, kernel-module-cls-rsvp, kernel-module-cls-rsvp6,	4.9.41+git0+dff5be9231-r7c	OS

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Component Name	Version	Type
kernel-module-cls-tcindex, kernel-module-cls-u32, kernel-module-cmac, kernel-module-crc-ccitt, kernel-module-crc-itu-t, kernel-module-crc7, kernel-module-cryptd, kernel-module-dsa-core, kernel-module-dwc3-of-simple, kernel-module-ebt-802-3, kernel-module-ebt-among, kernel-module-ebt-arp, kernel-module-ebt-arpreply, kernel-module-ebt-dnat, kernel-module-ebt-ip, kernel-module-ebt-limit, kernel-module-ebt-log, kernel-module-ebt-mark, kernel-module-ebt-mark-m, kernel-module-ebt-nflog, kernel-module-ebt-pkttype, kernel-module-ebt-redirect, kernel-module-ebt-snat, kernel-module-ebt-stp, kernel-module-ebt-vlan, kernel-module-ebtable-broute, kernel-module-ebtable-filter, kernel-module-ebtable-nat, kernel-module-ebtables, kernel-module-echainiv, kernel-module-efivarfs, kernel-module-efivars, kernel-module-em-cmp, kernel-module-em-meta, kernel-module-em-nbyte, kernel-module-em-text, kernel-module-em-u32, kernel-module-esp4, kernel-module-extcon-usb-gpio, kernel-module-font, kernel-module-fsccache, kernel-module-gcm, kernel-module-gf128mul, kernel-module-ghash-arm-ce, kernel-module-ghash-generic, kernel-module-gpio-pca953x, kernel-module-gpio-pisotr, kernel-module-gpio-tpic2810, kernel-module-gspca-main, kernel-module-i2c-emev2, kernel-module-input-polldev, kernel-module-ip-tables, kernel-module-ipcomp, kernel-module-ipt-masquerade, kernel-module-iptables-filter, kernel-module-iptables-nat, kernel-module-isp1760, kernel-module-iwldvm, kernel-module-iwlwifi, kernel-module-led-class-flash, kernel-module-libcrc32c, kernel-module-llc, kernel-module-mac80211, kernel-module-matrix-keymap, kernel-module-max17040-battery, kernel-module-max17042-battery, kernel-module-md4, kernel-module-mi86v7667, kernel-module-mtd-nandbiterrs, kernel-module-mtd-nandecctest, kernel-module-mtd-oobtest, kernel-module-mtd-pagetest, kernel-module-mtd-readtest, kernel-module-mtd-speedtest, kernel-module-mtd-stresstest, kernel-module-mtd-subpagetest, kernel-module-mtd-torturetest, kernel-module-musb-am335x, kernel-module-musb-dsps, kernel-module-mwifiex, kernel-module-mwifiex-sdio, kernel-module-nf-contrack, kernel-module-nf-contrack-ipv4, kernel-module-nf-contrack-protocol-sctp, kernel-module-nf-defrag-ipv4, kernel-module-nf-nat, kernel-module-nf-nat-ipv4, kernel-module-nf-nat-masquerade-ipv4, kernel-module-nf-nat-protocol-sctp, kernel-module-omap-hdqc, kernel-module-omap-remoteproc, kernel-module-omap2430, kernel-module-p8022, kernel-module-phy-am335x, kernel-module-phy-am335x-control, kernel-module-phy-generic, kernel-module-phy-gpio-vbus-usb, kernel-module-phy-isp1301, kernel-module-pru-rproc, kernel-module-pruss, kernel-module-pruss-intc, kernel-module-pruss-soc-bus, kernel-module-psnap, kernel-module-pwm-fsl-ftm, kernel-module-remoteproc, kernel-module-rpmsg-core, kernel-module-rpmsg-protocol, kernel-module-rpmsg-pru, kernel-module-rpmsg-rpc, kernel-module-rt2800lib, kernel-module-		

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Component Name	Version	Type
rt2800usb, kernel-module-rt2x00lib, kernel-module-rt2x00usb, kernel-module-sch-cbq, kernel-module-sch-choke, kernel-module-sch-codel, kernel-module-sch-drr, kernel-module-sch-dsmark, kernel-module-sch-gred, kernel-module-sch-hfsc, kernel-module-sch-htb, kernel-module-sch-ingress, kernel-module-sch-mqprio, kernel-module-sch-multiq, kernel-module-sch-netem, kernel-module-sch-prio, kernel-module-sch-qfq, kernel-module-sch-red, kernel-module-sch-sfb, kernel-module-sch-sfq, kernel-module-sch-tbf, kernel-module-sch-teql, kernel-module-sctp, kernel-module-sctp-diag, kernel-module-sha1-arm, kernel-module-sha1-arm-ce, kernel-module-sha1-arm-neon, kernel-module-sha2-arm-ce, kernel-module-sha256-arm, kernel-module-sha512-arm, kernel-module-snd-hwdep, kernel-module-snd-soc-fsl-sai, kernel-module-snd-soc-spdif-rx, kernel-module-snd-soc-spdif-tx, kernel-module-snd-usb-audio, kernel-module-snd-usbmidi-lib, kernel-module-soc-camera, kernel-module-soc-camera-platform, kernel-module-soc-mediabus, kernel-module-spi-bitbang, kernel-module-spi-gpio, kernel-module-sr-mod, kernel-module-stp, kernel-module-tcrypt, kernel-module-ti-am335x-tsc, kernel-module-ti-am335x-tscadc, kernel-module-ti-vip, kernel-module-ts-bm, kernel-module-ts-fsm, kernel-module-ts-kmp, kernel-module-tunnel4, kernel-module-uio, kernel-module-usbhid, kernel-module-usbserial, kernel-module-usbtest, kernel-module-uvccvideo, kernel-module-v4l2-tpg, kernel-module-videobuf-core, kernel-module-virtio-rpmsg-bus, kernel-module-vivid, kernel-module-wire, kernel-module-wl18xx, kernel-module-wlcore, kernel-module-wlcore-sdio, kernel-module-wlcore-spi, kernel-module-x-tables, kernel-module-xfrm-algo, kernel-module-xfrm-ipcomp, kernel-module-xfrm-user, kernel-module-xfrm4-mode-beet, kernel-module-xfrm4-mode-transport, kernel-module-xfrm4-mode-tunnel, kernel-module-xfrm4-tunnel, kernel-module-xt-classify, kernel-module-xt-comment, kernel-module-xt-cpu, kernel-module-xt-idletimer, kernel-module-xt-iprange, kernel-module-xt-length, kernel-module-xt-limit, kernel-module-xt-mac, kernel-module-xt-mark, kernel-module-xt-multiport, kernel-module-xt-nat, kernel-module-xt-pkttype, kernel-module-xt-policy, kernel-module-xt-sctp, kernel-module-xt-tcpudp, kernel-modules, kernel-vmlinux		
kernel-module-bc-example	1.14.3699939-r7m	OS
kernel-module-cmemk	4.14.00.00+git0+b514a99ac4-r7b	OS
kernel-module-cryptodev	1.8-r0.arago1	OS
kernel-module-galcore	5.0.11.p7-r7d	OS
kernel-module-pvrsrvkm	1.14.3699939-r7m	OS
kmod	23+git0+65a885df5f-r0	App
libacl1	2.2.52-r0	Library
libarchive	3.2.2-r0	Library
libasound2	1.1.2-r0	Library

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Component Name	Version	Type
libattr1	2.4.47-r0	Library
libavcodec57, libavformat57, libavutil55, libswresample2, libswscale4	3.1.3-r0.arago0	Library
libblkid1, libfdisk1	2.28.1-r0	Library
libboost-date-time1.61.0, libboost-filesystem1.61.0, libboost-system1.61.0	1.61.0-r0	Library
libbz2-1	1.0.6-r5	Library
libc6	2.23-r0.arago36	Library
libcairo-gobject2, libcairo2	1.14.6-r0	Library
libcap2	2.25-r0	Library
libcom-err2, libe2p2, libext2fs2	1.43-r1	Library
libcrypto1.0.0	1.0.2j-r0.arago0.wa	Library
libcurl4	7.54.1-r0.wa0	Library
libdbus-1-3	1.10.10-r0.arago1	Library
libdce1	3.00.13.00-r0	Library
libdrm-omap1, libdrm2	2.4.70-r0.arago2	Library
libevtlog0	0.2.13-r0	Library
libexif12	0.6.21-r0	Library
libexpat1	2.2.0-r0	Library
libfaad2	2.7-r1	Library
libffi6	3.2.1-r0	Library
libflac8	1.3.1-r0	Library
libfontconfig1	2.12.1-r0	Library
libform5	6.0+20160625-r0	Library
libfreetype6	2.6.5-r0.arago0	Library
libgbm2	10.0.0-r0.tisdk0	Library
libgcc-s1	6.2.1-r0.arago36	Library
libgdk-pixbuf-2.0-0	2.34.0-r0	Library
libglib-2.0-0	1:2.48.2-r0	Library
libgmp10	6.1.1-r0	Library
libgnutls30	3.5.3-r0.arago0.wa0	Library
libgphoto2-6, libgphoto2-camlibs, libgphoto2-port12	2.5.8-r0.tisdk0	Library
libgstadaptivedemux-1.0-0, libgstbadaudio-1.0-0, libgstbadbase-1.0-0, libgstbadvideo-1.0-0, libgstbasecamerabinsrc-1.0-0, libgstcodecparsers-1.0-0, libgstdrm-1.0-0, libgstinsertbin-1.0-0, libgstmpegs-1.0-0, libgstphotography-1.0-0, libgstplayer-1.0-0, libgsturidownloader-1.0-0, libgstwayland-1.0-0	1.8.3-r5	Library
libgstallocators-1.0-0, libgstapp-1.0-0, libgstaudio-1.0-0, libgstfft-1.0-0, libgstpbutils-1.0-0, libgsttrifft-1.0-0, libgsttrtp-1.0-0, libgsttrtpsp-1.0-0, libgstsd-1.0-0, libgsttag-1.0-0, libgstvideo-1.0-0	1.8.3-r0.arago0.wa0	Library
libgudev-1.0-0	230-r0	Library

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Component Name	Version	Type
libharfbuzz0	1.3.0-r0	Library
libcudata57, libcui18n57, libcuc57	57.1-r0	Library
libidn11	1.33-r0	Library
libjpeg62	1:1.5.0-r0	Library
libjson-c2	0.12-r0	Library
libkmod2	23+git0+65a885df5f-r0	Library
libltdl7	2.4.6-r0	Library
liblzma5	5.2.2-r0	Library
libmenu5	6.0+20160625-r0	Library
libmount1	2.28.1-r0	Library
libncurses5, libncursesw5	6.0+20160625-r0	Library
libogg0	1.3.2-r0	Library
libopencv-aruco3.3, libopencv-bgsegm3.3, libopencv-bioinspired3.3, libopencv-calib3d3.3, libopencv-ccalib3.3, libopencv-core3.3, libopencv-cvv3.3, libopencv-datasets3.3, libopencv-dnn3.3, libopencv-dpm3.3, libopencv-face3.3, libopencv-features2d3.3, libopencv-flann3.3, libopencv-freetype3.3, libopencv-fuzzy3.3, libopencv-highgui3.3, libopencv-img-hash3.3, libopencv-imgcodecs3.3, libopencv-imgproc3.3, libopencv-line-descriptor3.3, libopencv-ml3.3, libopencv-objdetect3.3, libopencv-optflow3.3, libopencv-phase-unwrapping3.3, libopencv-photo3.3, libopencv-plot3.3, libopencv-reg3.3, libopencv-rgbd3.3, libopencv-saliency3.3, libopencv-shape3.3, libopencv-stereo3.3, libopencv-stitching3.3, libopencv-structured-light3.3, libopencv-superres3.3, libopencv-surface-matching3.3, libopencv-text3.3, libopencv-tracking3.3, libopencv-video3.3, libopencv-videoio3.3, libopencv-videostab3.3, libopencv-xfeatures2d3.3, libopencv-ximgproc3.3, libopencv-xobjdetect3.3, libopencv-xphoto3.3	3.3+git0+4af3ca4e4d-wa0	Library
libopkg1	1:0.3.3-r0	Library
liborc-0.4-0, liborc-test-0.4-0	0.4.25-r0	Library
libpam, libpam-runtime	1.3.0-r5	Library
libpanel5, libpanelw5	6.0+20160625-r0	Library
libpcre1	8.39-r0	Library
libpixmap-1-0	1:0.34.0-r0	Library
libpng16-16	1.6.24-r0	Library
libpopt0	1.16-r3	Library
libpulse0, libpulsecommon	9.0-r0	Library
libpython2.7-1.0	2.7.12-r1.wa0	Library
libqt5svg-plugins, libqt5svg5	5.7.1+git0+d3d3db5a75-r0	Library
libreadline6	6.3-r0	Library
libsamplerate0	0.1.8-r1	Library
libsmartcols1	2.28.1-r0	Library

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Component Name	Version	Type
libsndfile1	1.0.27-r0	Library
libsoup-2.4	2.54.1-r0	Library
libspeex1	1.2rc2-r0	Library
libsqlite3-0	3:3.14.1-r0	Library
libss2	1.43-r1	Library
libssl1.0.0	1.0.2j-r0.arago0.wa	Library
libstdc++6	6.2.1-r0.arago36	Library
libsyslog-ng-3.5-0	3.6.4-r0.arago0.wa5	Library
libsystemd0, libudev1	1:230+git0+3a74d4fc90-r0.arago4.wa5	Library
libtag1	1.9.1-r0	Library
libtheora	1.1.1-r1	Library
libticmem1	4.14.00.00+git0+b514a99ac4-r1	Library
libtiff5	4.0.7-r0.arago0	Library
libtinfo5	6.0+20160625-r0	Library
libts-1.0-0	1.1-r0.arago1	Library
libusb-1.0-0	1.0.20-r0	Library
libuuid1	2.28.1-r0	Library
libv4l	1.10.1-r0	Library
libvorbis	1.3.5-r0	Library
libvorbisidec1	20150107-r1	Library
libwebp	0.5.1-r0	Library
libxml2	2.9.4-r0	Library
libz1	1.2.8-r0	Library
logo	1.0-v1.60.00-A0007	Miscellaneous Files
m4	1.4.17-r0	App
media-ctl	1.10.1-r0	App
modutils-initscripts	1.0-r7	App
nano	2.2.5-r3.0	App
ncurses-terminfo, ncurses-terminfo-base	6.0+20160625-r0	App
netbase	1:5.3-r0	App/Library
nettle	3.2-r0	App
newmar	1.0-r0	App
nucleus	1.0+local-v1.60.00-A0007	App
nucleus-init	1.0-r0	App
opencv, opencv-apps	3.3+git0+4af3ca4e4d-wa0	App
openssh, openssh-keygen, openssh-scp, openssh-sftp, openssh-ssh, openssh-sshd	7.3p1-r0.wa0	App
openssl, openssl-conf, openssl-misc	1.0.2j-r0.arago0.wa	Library

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Component Name	Version	Type
opkg	1:0.3.3-r0	App
opkg-arch-config	1.0-r1	Miscellaneous Files
oprofile	1.1.0-r0	App
os-release	1.0-r0	App
packagegroup-core-boot	1.0-r17	App/Library
pam-plugin-deny, pam-plugin-env, pam-plugin-faildelay, pam-plugin-group, pam-plugin-keyinit, pam-plugin-lastlog, pam-plugin-limits, pam-plugin-loginuid, pam-plugin-mail, pam-plugin-motd, pam-plugin-nologin, pam-plugin-permit, pam-plugin-rootok, pam-plugin-securetty, pam-plugin-shells, pam-plugin-unix, pam-plugin-warn	1.3.0-r5	Library
pango	1.40.1-r0	Library
pointercal	0.0-r11	Miscellaneous Files
procps	3.3.12-r0	App
python-2to3, python-argparse, python-audio, python-bsddb, python-codecs, python-compile, python-compiler, python-compression, python-contextlib, python-core, python-crypt, python-ctypes, python-curses, python-datetime, python-db, python-debugger, python-difflib, python-distutils, python-doctest, python-email, python-fcntl, python-gdbm, python-hotshot, python-html, python-idle, python-image, python-importlib, python-io, python-json, python-lang, python-logging, python-mailbox, python-math, python-mime, python-misc, python-mmap, python-modules, python-multiprocessing, python-netclient, python-netserver, python-numbers, python-pickle, python-pkgutil, python-plistlib, python-pprint, python-profile, python-pydoc, python-re, python-readline, python-resource, python-robotparser, python-shell, python-smtpd, python-sqlite3, python-sqlite3-tests, python-stringold, python-subprocess, python-syslog, python-terminal, python-tests, python-textutils, python-threading, python-tkinter, python-unittest, python-unixadmin, python-xml, python-xmlrpc, python-zlib	2.7.12-r1.wa0	Library
python-nose	1.3.7-r0	Library
python-numpy	1.11.1-r0	Library
python-opencv	3.3+git0+4af3ca4e4d-wa0	Library
qtbase	5.7.1+git0+a55f36211e-r0.arago12.tisdk4	Library
qtbase-plugins	1.0-r0.tisdk1	Miscellaneous Files
qtimageformats-plugins	5.7.1+git0+11300c62aa-r0	Library
rsync	3.1.2-r0	App
run-postinsts	1.0-r9	App
rv700-initscripts	1.0-v1.60.00-A0007	App
screen	4.4.0-r0	App

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Component Name	Version	Type
screenshot	1.0-r2	App
shadow, shadow-base	4.2.1-r0	App
shadow-securetty	4.2.1-r3.arago0	App
sshpas	1.06-r0	App
strace	4.13-r0	App
swup	1.0+0+47c23fa943-r1	App
syslog-ng	3.6.4-r0.arago0.wa5	App/Library
systemd, systemd-analyze, systemd-container, systemd-extra-utils, systemd-vconsole-setup	1:230+git0+3a74d4fc90-r0.arago4.wa5	App
systemd-compat-units	1.0-r29	App
systemd-serialgetty	1.0-r5	App
tbb	4.1-r20130314	Library
ti-gc320-driver	5.0.11.p7-r7d	Library
ti-gc320-libs	5.0.11.p7-r1	Library
ti-ipc	3.46.02.04-r1.0	Library
ti-sgx-ddk-km	1.14.3699939-r7m	Library
ti-sgx-ddk-um, ti-sgx-ddk-um-plugins	1.14.3699939-r26.tisd5	Library
trace-cmd	2.6-r0	App
tslib-conf	1.1-r0.arago1	Library
ttf-fonts	wa-csm-v0	Miscellaneous Files
tzdata	2020a-wa0	Miscellaneous Files
u-boot	2017.01+git0+d834e24ee6-wa0	Bootloader
udev, udev-hwdb	1:230+git0+3a74d4fc90-r0.arago4.wa5	App
unzip	1:6.0-r5	App
update-alternatives-opkg	0.3.2+git0+3ffece9bf1-r0	App
update-rc.d	0.7-r5	App
usbutils	008-r0	App
util-linux, util-linux-agetty, util-linux-cfdisk, util-linux-fdisk, util-linux-fsck, util-linux-losetup, util-linux-mkfs, util-linux-mount, util-linux-mountpoint, util-linux-prlimit, util-linux-readprofile, util-linux-runuser, util-linux-sfdisk, util-linux-sulogin, util-linux-swaponoff, util-linux-umount	2.28.1-r0	App
v4l-utils	1.10.1-r0	App
volatile-binds	1.0-r0	App
vpdma-fw	03-2012-r1	App
wayland	1.11.0-r0	App
yavta	0.0-r2	App
zip	3.0-r2	App

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5 Network Ports and Services

- RV700 does not run any network service.
- RV700 uses TLS 1.2 while communicating with RVN
- RV700 uses SSH and SFTP while communicating with Azure – Fleet Management Server and Azure – BLOB Server
- RV700 uses UDP while communicating with NTP Server
- All Communications are initiated by RV700

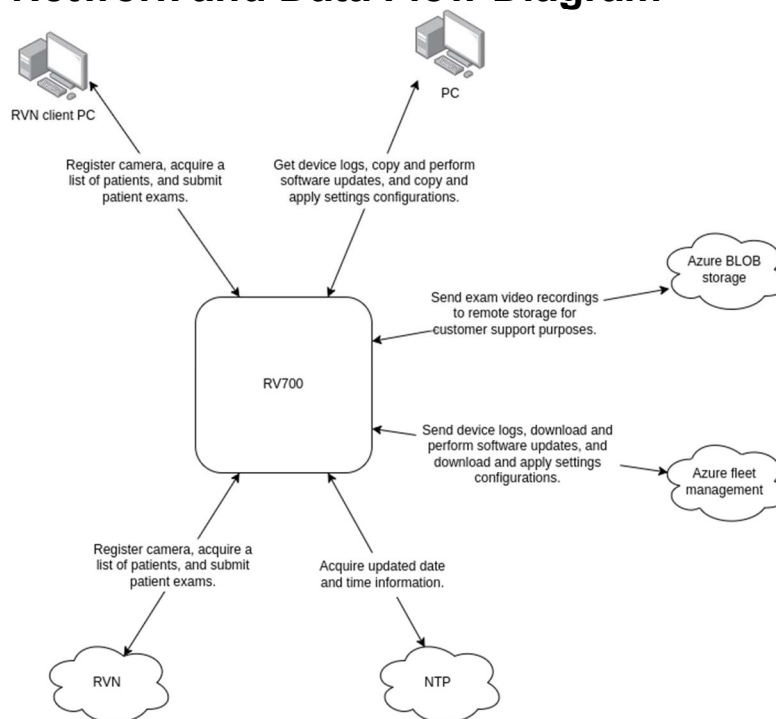
6 Sensitive Data Transmitted

- Sensitive Patient Data is Transferred only between RVN and RV700
- Customizable Patient Orders (such as First name, Last name, Date of Birth, Gender).
- Patient's Retinal Images
- Patient Exam Data

7 Sensitive Data Stored

- Customizable Patient Orders (such as First name, Last name, Date of Birth, Gender).
- Patient Exam Data
- Patient Retinal Images
- RV700 configuration settings (including device Access Code).
- RV700 Wireless configuration settings (including Access Point Passwords, Certificates for Communication and Encryption).

8 Network and Data Flow Diagram



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9 Malware Protection

RV700 is an embedded device that does not allow user to install additional software.

10 Authentication Authorization

RV700 does not support user-based access. Customer can set an Access Code to avoid unwanted access to the device.

11 Network Controls

Since RV700 is an embedded device, user does not browse internet. RV700 supports wireless based TLS 1.2 communication with RVN. RV700 uses SSH and SFTP while communicating with Azure Fleet Management Server and Azure BLOB Server. RV700 uses UDP while communicating with NTP Server. All communications are initiated by RV700.

12 Encryption

RV700 does not support Encryption at Rest. Device needs a proprietary cable and Password based login to access the data.

RVN: Patient Data is transferred in a TLS 1.2 tunnel with AES-256-CBC encryption and X.509 certificate-based mutual authentication of device (client) and server.

RV700 uses SSH and SFTP while communicating non patient data with Azure – Fleet Management Server and Azure – BLOB Server.

RV700 uses UDP while communicating non patient data with NTP Server.

13 Audit Logging

RV 700 does not implement audit logs.

RV 700 provides basic logging mechanism intended for troubleshooting purposes. It shall log information about the following network communication in a log file:

- Configuration changes
- Connection success or failure
- Device Power ON
- Device Shut Down

14 Remote Connectivity

RV700 does not support remote connectivity.

15 Service Handling

Service procedures are handled by the supplier. Please contact Baxter for more information.

16 End-of-Life and End-of-Support

RV700 End-of-Life or End-of-Support dates are not established.

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17 Secure Coding Standards

Baxter software development process incorporates secure development policies from IEC 62304.

18 System Hardening Standards

RV700 does not use system hardening standards.

19 Risk Summary

A Security Risk Assessment was completed of the RV700 product. Risks were assessed based on threat, impact and vulnerability. Vulnerability scanning was completed on the product and no critical vulnerabilities were identified. In addition, the RV700 is enrolled in the Baxter's Security Vulnerability Management Process, which routinely monitors our applications for vulnerabilities. Customer responsibilities were identified in the risk assessment, specifically:

- The device and IT Network the device is connected to should be securely configured and maintained per the IEC 80001 standard, or an equivalent network security standard or practice.
- Unauthorized connection to IT networks could result in previously unidentified risks to patients, operators, or third parties. The manufacturer is not liable for these additional risks, as the identification, analysis, evaluation, and control should be conducted by the responsible organization. Changes to the IT network could also introduce new risks that require additional analysis. This includes changes in network configuration, connection of additional items, disconnection of items, update of equipment, and upgrade of equipment.

20 Third Party Certification

3rd party certifications do not currently apply to RV700.

21 Disclaimer

The information contained in this Product Security White Paper is for reference purposes only. Nothing contained in this document or relayed verbally to any customer will be deemed to amend, modify or supersede the terms and conditions of any written agreement between such customer and Baxter, or Baxter subsidiaries or affiliates (collectively, "Baxter's"). does not make any promises or guarantees to customer that any of the methods or suggestions described in this Product Security White Paper will restore customer's systems, resolve any issues related to any malicious code or achieve any other stated or intended results. Customer exclusively assumes all risk of utilizing or not utilizing any guidance described in this Product Security White Paper.