United States Election Assistance Commission

Certificate of Conformance

Dominion Voting Systems
Democracy Suite 5.5-D

VVSG 2005 VER. I
EAC
CERTIFIED

The voting system identified on this certificate has been evaluated at an accredited voting system testing laboratory for conformance to the *Voluntary Voting System Guidelines Version 1.0 (VVSG 1.0)*. Components evaluated for this certification are detailed in the attached Scope of Certification document. This certificate applies only to the specific version and release of the product in its evaluated configuration. The evaluation has been verified by the EAC in accordance with the provisions of the EAC *Voting System Testing and Certification Program Manual* and the conclusions of the testing laboratory in the test report are consistent with the evidence adduced. This certificate is not an endorsement of the product by any agency of the U.S. Government and no warranty of the product is either expressed or implied.

Product Name: Democracy Suite

Model or Version: 5.5-D

Name of VSTL: Pro V&V

EAC Certification Number: DVS-DemSuite5.5-D

Date Issued: June 8, 2022

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Interim Executive Director

Scope of Certification Attached

Scope of Certification

This document describes the scope of the validation and certification of the system defined above. Any use, configuration changes, revision changes, additions or subtractions from the described system are not included in this evaluation.

Significance of EAC Certification

An EAC certification is an official recognition that a voting system (in a specific configuration or configurations) has been tested to and has met an identified set of Federal voting system standards. An EAC certification is **not**:

- An endorsement of a Manufacturer, voting system, or any of the system's components.
- A Federal warranty of the voting system or any of its components.
- A determination that a voting system, when fielded, will be operated in a manner that meets all HAVA requirements.
- A substitute for State or local certification and testing.
- A determination that the system is ready for use in an election.
- A determination that any particular component of a certified system is itself certified for use outside the certified configuration.

Representation of EAC Certification

Manufacturers may not represent or imply that a voting system is certified unless it has received a Certificate of Conformance for that system. Statements regarding EAC certification in brochures, on Web sites, on displays, and in advertising/sales literature must be made solely in reference to specific systems. Any action by a Manufacturer to suggest EAC endorsement of its product or organization is strictly prohibited and may result in a Manufacturer's suspension or other action pursuant to Federal civil and criminal law.

System Overview:

The D-Suite 5.5-D Voting System is a paper-based optical scan voting system with a hybrid paper/DRE option consisting of the following major components: The Election Management System (EMS), the ImageCast Central (ICC), the ImageCast Precinct (ICP and ICP2), the ImageCast Evolution (ICE), the ImageCast X (ICX) DRE w/ Reports Printer, ImageCast X (ICX) DRE w/ voter-verifiable paper audit trail (VVPAT), and the ImageCast X ballot marking device (BMD). The D-Suite 5.5-D Voting System configuration is a modification from the EAC approved D-Suite 5.5-C system configuration.

System Modifications:

The list below includes changes between this Democracy Suite 5.5-D system and the baseline of the Democracy Suite 5.5-C Voting System:

EMS
- EED - Added a warning message when election files have been re-created for tabulators that have already had their removable medium programmed
- RTR - Added new report for the Party Preference Contest, as used in WI
- RTR - Added new status report for results batches

ICC
- Modified application shut down sequence to allow the user to complete uploads to RTR before shutting down

ICP
- Improved tolerance in scanning of ballots when scanned image is skewed
- Modified ICP to reset provisional flag on each ballot scan

- Modified the audio review session to allow the voter to end the review at a point of their choosing

ICX General
- Added support for WI Party Preference
- Modified multi-column contest layout
- Modified the device selection screen to display all menu options in the language of choice
- Corrected footer on Status Tape to remove the message "Results are nonzero" when the results are zero
- Modified the behavior of pressing the Back button in the Date/Time widow and return to the Poll Worker Menu

ICX BMD
- Modified the Vote Simulation, in BMD mode, to print the sub-header and activation code for a given ballot ID regardless of Vote Simulation mode
- Added new option allowing contests with many selections to be split across columns on the BMD ballot

ICX DRE
- Corrected issue where Zero and Summary Reports, in DRE mode, would not print the main body of the report when one or more choice names have specific character lengths
- Modified the VVPAT Zero and Summary Report to ensure the poll status with a data and time is visible to the Poll Worker when printing is complete

Language capability:

This section provides information describing the languages supported by the various components of the system.

Language	ICE	ICP	ICP2	ICX
Alaska Native	Yes, if using Latin alphabet	Yes	No	No
Apache	Audio only	Audio only	No	No
Bengali	Yes	Yes	Yes	Yes
Chinese	Yes	Yes	Yes	Yes
English	Yes	Yes	Yes	Yes
Eskimo	Yes, if using Latin alphabet	Yes	No	No
Filipino	Yes, if using Latin alphabet	Yes	Yes	No
French	Yes	Yes	No	Yes
Hindi	Yes	Audio only	Yes	Yes
Japanese	Yes	Yes	Yes	Yes
Jicarilla	Audio only	Audio only	No	No
Keres	Audio only	Audio only	No	No
Khmer	Yes	Audio only	No	No
Korean	Yes	Yes	Yes	Yes
Navajo	Audio only	Audio only	No	No
Seminole	Audio only	Audio only	No	No
Spanish	Yes	Yes	Yes	Yes
Tagalog	No	No	No	Yes
Thai	Yes	Audio only	Yes	Yes
Towa	Audio only	Audio only	No	No
Ute	Audio only	Audio only	No	No
Vietnamese	Yes	Yes	Yes	Yes
Yuman	Audio only	Audio only	No	No

DEMOCRACY SUITE® - System High-Level Block Diagram
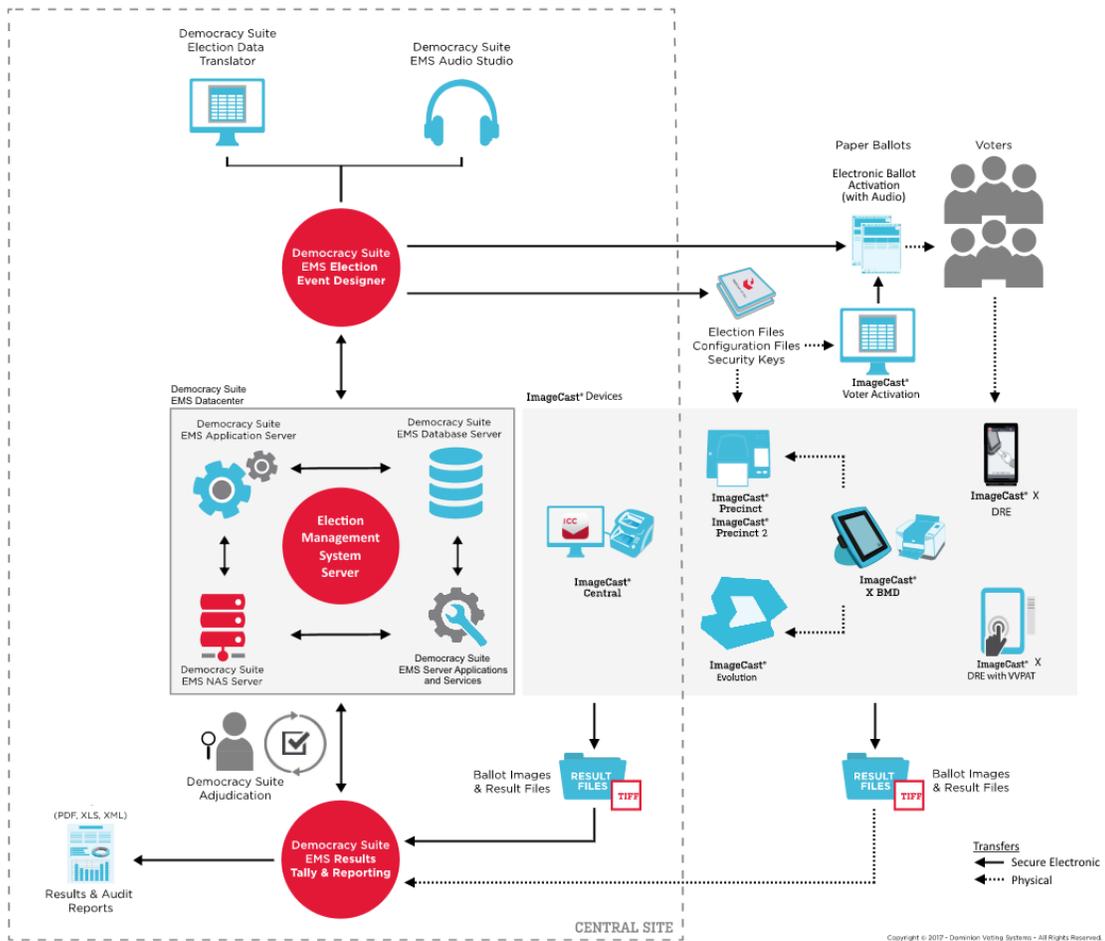
Components Included:

This section provides information describing the components and revision level of the primary components included in this Certification.

Voting System Software Components:

System Component	Software or Firmware Version	Operating System or COTS	Comments
EMS Election Event Designer (EED)	5.5.52.6	Windows 10 Pro	EMS
EMS Results Tally and Reporting (RTR)	5.5.52.6	Windows 10 Pro	EMS
EMS Application Server	5.5.52.6	Windows Server 2012 R2 Windows 10 Pro	EMS
EMS File System Service (FSS)	5.5.52.6	Window 10 Pro	EMS
EMS Audio Studio (AS)	5.5.52.6	Windows 10 Pro	EMS
EMS Data Center Manager (DCM)	5.5.52.6	Windows Server 2012 R2 Windows 10 Pro	EMS
EMS Election Data Translator (EDT)	5.5.52.6	Windows 10 Pro	EMS
ImageCast Voter Activation (ICVA)	5.5.52.6	Windows 10 Pro	EMS
EMS Adjudication (ADJ)	5.5.40.3	Windows 10 Pro	EMS
EMS Adjudication Services	5.5.40.6	Windows 10 Pro	EMS
Smart Card Helper Service (SCHS)	5.5.52.6	Windows 10 Pro	EMS
Election Firmware	5.5.45.3	uClinux	ICP
Firmware Updater	5.5.45.3	uClinux	ICP
Firmware Extractor	5.5.45.3	uClinux	ICP
Kernel (uClinux)	5.5.45.3	Modified COTS	ICP
Boot Loader (COLILO)	20040221	Modified COTS	ICP
Asymmetric Key Generator	5.5.45.3	uClinux	ICP
Asymmetric Key Exchange Utility	5.5.45.3	uClinux	ICP
Firmware Extractor (Technician Key)	5.5.45.3	uClinux	ICP
ICP2 Application	5.5.2.1	uClinux	ICP2
ICP2 Update Card	5.5.2.1	uClinux	ICP2
Voting Machine	5.5.6.5	Ubuntu Linux	ICE
Election Application	5.5.6.5	Ubuntu Linux	ICE
ImageCast Central Application	5.5.52.2	Windows 10 Pro	ICC
ICX Application	5.5.25.2	Android 5.1.1 (ICX Prime) Android 4.4.4 (ICX Classic)	ICX

Voting System Platform:

System Component	Version	Operating System or COTS	Comments
Microsoft Windows Server	2012 R2 Standard SP3	Unmodified COTS	EMS Server SW Component
Microsoft Windows	10 Professional	Unmodified COTS	EMS Client/Server SW Component
.NET Framework	3.5 and 4.5	Unmodified COTS	EMS Client/Server SW Component
Microsoft Visual J#	2.0	Unmodified COTS	EMS Client/Server SW Component
Microsoft Visual C++ 2013 Redistributable	2013	Unmodified COTS	EMS Client/Server SW Component
Microsoft Visual C++ 2015 Redistributable	2015	Unmodified COTS	EMS Client/Server SW Component

System Component	Version	Operating System or COTS	Comments
Java Runtime Environment	7u80	Unmodified COTS	EMS Client/Server SW Component
Java Runtime Environment	8u144	Unmodified COTS	EMS Client/Server SW Component
Microsoft SQL Server 2016 Standard	2016 Standard SP3	Unmodified COTS	EMS Client/Server SW Component
Microsoft SQL Server 2016 Express	2016 SP3	Unmodified COTS	EMS Client/Server SW Component
Microsoft SQL Server Management Studio	17.1	Unmodified COTS	EMS Client/Server SW Component
Cepstral Voices	6.2.3.801	Unmodified COTS	EMS Client/Server SW Component
Arial Narrow Fonts	2.37a	Unmodified COTS	EMS Client/Server SW Component
Maxim iButton Driver	4.05	Unmodified COTS	EMS Client/Server SW Component
Adobe Reader DC	AcrobatDC	Unmodified COTS	EMS Client/Server SW Component
Microsoft Access Database Engine	2010	Unmodified COTS	EMS Client/Server SW Component
Open XML SDK 2.0 for Microsoft Office	2.0	Unmodified COTS	EMS Client/Server SW Component
Infragistics NetAdvantage Win Forms 2011.1	2011 Vol. 1	Unmodified COTS	EMS SW Platform
Infragistics NetAdvantage WPF 2012.1	2012 Vol. 1	Unmodified COTS	EMS SW Platform
TX Text Control Library for .NET	16.0	Unmodified COTS	EMS SW Platform
SOX	14.3.1	Unmodified COTS	EMS SW Platform
NLog	1.0.0.505	Unmodified COTS	EMS SW Platform
iTextSharp	5.0.5	Unmodified COTS	EMS SW Platform
OpenSSL	1.0.2K	Unmodified COTS	EMS SW Platform
OpenSSL FIPS Object Module	2.0.14	Unmodified COTS	EMS SW Platform
SQLite	1.0.103.0	Unmodified COTS	EMS SW Platform
Lame	3.99.4	Unmodified COTS	EMS SW Platform
Speex	1.0.4	Unmodified COTS	EMS SW Platform
Ghostscript	9.04	Unmodified COTS	EMS SW Platform
One Wire API for .NET	4.0.2.0	Unmodified COTS	EMS SW Platform
Avalon-framework-cvs-20020806	20020806	Unmodified COTS	EMS SW Platform
Batik	0.20-5	Unmodified COTS	EMS SW Platform
Fop	0.20-5	Unmodified COTS	EMS SW Platform
Microsoft Visual J# 2.0 Redistributable Package – Second Edition (x64)	2.0	Unmodified COTS	EMS SW Platform
Entity framework	6.1.3	Unmodified COTS	EMS SW Platform
Spreadsheetlight	3.4.3	Unmodified COTS	EMS SW Platform
Open XML SDK 2.0 for Microsoft Office	2.0.5022.0	Unmodified COTS	EMS SW Platform
Open SSL	1.0.2K	Unmodified COTS	ICP
OpenSSL FIPS Object Module	2.0.10	Unmodified COTS	ICP
Zlib	1.2.3	Unmodified COTS	ICP
uClinux	20070130	Modified COTS	ICP
Kernel (Linux)	2.6.30.9-dvs-36	Modified COTS	ICE

System Component	Version	Operating System or COTS	Comments
U-Boot	1.3.4	Modified COTS	ICE
Google Text-to-Speech Engine	3.11.12	Unmodified COTS	ICX SW
Kernel	4.9.11	Modified COTS	ICP2
U-Boot	2017.03	Modified COTS	ICP2
Zxing Barcode Scanner	4.7.5	Modified COTS	ICX SW
SoundTouch	1.9.2	Modified COTS	ICX SW
ICX Prime Android 5.1.1 Image	5.1.1-1.17.3	Modified COTS	ICX SW
ICX Classic Android 4.4.4 Image	0.0.98	Modified COTS	ICX SW
OpenSSL FIPS Object Module	2.0.10 (Cert 2473)	Unmodified COTS	ICX SW Build Library
OpenSSL	1.0.2K	Unmodified COTS	ICC SW Build Library
OpenSSL FIPS Object Module	2.0.10 (Cert 1747)	Unmodified COTS	ICC SW Build Library
1-Wire Driver (x86)	4.05	Unmodified COTS	ICC Runtime SW
1-Wire Driver (x64)	4.05	Unmodified COTS	ICC Runtime SW
Canon DR-G1130 TWAIN Driver	1.2 SP6	Unmodified COTS	ICC Runtime SW
Canon DR-G160II TWAIN Driver	1.2 SP6	Unmodified COTS	ICC Runtime SW
Canon DR-M260 TWAIN Driver,	1.1 SP2	Unmodified COTS	ICC Runtime SW
InoTec HiPro 821 TWAIN Driver	1.2.0.5	Unmodified COTS	ICC Runtime SW
Visual C++ 2013 Redistributable (x86)	12.0.30501	Unmodified COTS	ICC Runtime SW
Machine Configuration File (MCF)	5.5.24.1_20220112	Proprietary	ICX Configuration File
Device Configuration File (DCF)	5.5.45.3_20220118	Proprietary	ICP and ICC Configuration File
ICE Machine Behavior Settings	5.5.6.3_20200415	Proprietary	ICE Configuration
ICP2 Machine Behavior Settings	5.5.2.1_20200415	Proprietary	ICP2 Configuration

Hardware Components:

System Component	Hardware Version	Proprietary or COTS	Comments
ImageCast Precinct (ICP)	PCOS-320C	Proprietary	Precinct Scanner
ImageCast Precinct (ICP)	PCOS-320A	Proprietary	Precinct Scanner
ImageCast 2 Precinct (ICP2)	PCOS-330A	Proprietary	Precinct Scanner
ImageCast Evolution (ICE)	PCOS-410A	Proprietary	Precinct Scanner
ICP Ballot Box	BOX-330A	Proprietary	Ballot Box
ICP Ballot Box	BOX-340C	Proprietary	Ballot Box
ICP Ballot Box	BOX-341C	Proprietary	Ballot Box
ICP Ballot Box	ElectionSource IM-COLLAPSIBLE	Proprietary	Ballot Box
ICE Ballot Box	BOX-410A	Proprietary	Ballot Box
ICE Ballot Box	BOX-420A	Proprietary	Ballot Box
ICP2 Ballot Box	BOX-350A	Proprietary	Ballot Box
ICP2 Ballot Box	BOX-340C	Proprietary	Ballot Box
ICP2 Ballot Box	BOX-341C	Proprietary	Ballot Box
ICP2 Ballot Box	ElectionSource IM-COLLAPSIBLE	Proprietary	Ballot Box
ICX UPS Inline EMI Filter	1.0	Proprietary	EMI Filter
ICX Tablet (Classic)	aValue 15" Tablet (SID-15V)	COTS	Ballot Marking Device
ICX Tablet (Classic)	aValue 21" Tablet (SID-21V)	COTS	Ballot Marking Device
ICX Tablet (Prime)	aValue 21" Tablet (HID-21V) (Steel or Aluminum chassis)	COTS	Ballot Marking Device or Direct Recording Electronic
Thermal Printer	Seiko SII RP-D10	COTS	Report Printer

System Component	Hardware Version	Proprietary or COTS	Comments
Thermal Printer (VVPAT)	KFI VRP3 V1 and V1C	COTS	Voter-verifiable paper audit trail (VVPAT)
Server	Dell PowerEdge R620	COTS	Standard Server
Server	Dell PowerEdge R630	COTS	Standard Server
Server	Dell PowerEdge R640	COTS	Standard Server
ICC Workstation HW	Dell Optiplex 5270 All in One	COTS	
ICC Workstation HW	Dell OptiPlex 7440 All in One	COTS	
ICC Workstation HW	Dell OptiPlex 3050 All In One	COTS	
ICC Workstation HW	Dell OptiPlex 9030 All In One	COTS	
ICC Workstation HW	Dell OptiPlex 9020 All In One	COTS	
ICC Workstation HW	Dell OptiPlex 9010 All In One	COTS	
ICC Workstation HW	Dell Precision 3450 XE	COTS	
ICC Workstation HW	Dell Precision 3440 XE	COTS	
ICC Scanner	Canon imageFormula DR-G1130	COTS	Central Count Scanner
ICC Scanner	Canon imageFormula DR-M160 II	COTS	Central Count Scanner
ICC Scanner	Canon imageFormula DR-M260	COTS	Central Count Scanner
ICC Scanner	Canon imageFormula DR-G2140	COTS	Central Count Scanner
ICC Scanner	InoTec HiPro 821	COTS	Central Count Scanner
ICC Workstation HW	Dell Optiplex 7070	COTS	
ICC Workstation HW	Dell Optiplex 7060	COTS	
ICC Workstation HW	Dell Optiplex 7050	COTS	
ICC Workstation HW	Dell Optiplex XE3	COTS	
ICC Scanner Monitor	Lenovo 10QXPAR1US	COTS	
ICC Scanner Monitor	Dell 2418HT Monitor	COTS	
ICC Scanner Monitor	Lenovo 11GCPAR1US	COTS	
ICC Scanner Monitor	Planar PCT2235	COTS	
Client Workstation HW and Express Server	Dell Precision 3430	COTS	
Client Workstation HW and Express Server	Dell Precision 3431	COTS	
Client Workstation HW and Express Server	Dell Precision T3420	COTS	
Client Workstation HW and Express Server	Dell Precision 3440 XE	COTS	
Client Workstation HW and Express Server	Dell Precision 3450 XE	COTS	
Client Workstation HW	Dell Precision T1700	COTS	
Client Workstation HW	Dell Precision T3420	COTS	
Client Workstation HW	Dell Precision 3430	COTS	
Client Workstation HW	Dell Precision 3431	COTS	
Client Workstation HW	Dell Precision 3440 XE	COTS	
Client Workstation HW	Dell Precision 3450 XE	COTS	
ICX Printer	HP LaserJet Pro Printer M402dn	COTS	
ICX Printer	HP LaserJet Pro Printer M402dne	COTS	
ICX Printer	HP LaserJet Printer M501dn	COTS	
ICE Dual Monitor	AOC e1649FWU	COTS	
ICE Dual Monitor	Display Logic LM15.6-USB-DV.B	COTS	
Monitor	Dell Monitor KM632	COTS	
Monitor	Dell Monitor P2414Hb	COTS	
Monitor	Dell P2419H	COTS	

System Component	Hardware Version	Proprietary or COTS	Comments
Monitor	Dell P2417H	COTS	
Monitor	Dell Ultrasharp 24" Monitor U2414H	COTS	
CD/DVD Reader	Dell DVD Multi Recorder GP60NB60	COTS	
iButton Programmer	Maxim iButton Programmer DS9490R# with DS1402-RP8+	COTS	
UPS	Tripp Lite SMART1500RMXL2U	COTS	
UPS	APC SMT1500C Smart-UPS	COTS	
UPS	APC SMT1500 Smart-UPS	COTS	
UPS	APC BE600M1	COTS	
UPS	APC BR1000G	COTS	
UPS	CyberPower PR1500LCD	COTS	
UPS	CyberPower PR1500LCD-VTVM	COTS	
Network Switch	Dell X1008	COTS	
Network Switch	Dell X1018	COTS	
Network Switch	Dell X1026	COTS	
Network Switch	Dell PowerConnect 2808	COTS	
Network Switch	Cisco 8-port Switch (CBS350-8T-E-2G)	COTS	
Network Switch	Cisco 24-port Switch (CBS350-24T-4G)	COTS	
Sip and Puff	Enabling Devices #972	COTS	
Headphones	Cyber Acoustics ACM-70 and ACM-70B	COTS	
4-way Joystick Controller	S26	Modified COTS	
Rocker (Paddle) Switch	Enabling Device #971	COTS	
Rocker (Paddle) Switch	AbleNet 10033400 (2x)	COTS	
Rocker (Paddle) Switch Cable	Hosa Technology YMM-261 (for use with AbleNet switches)	COTS	
CF Card Reader	IOGEAR SDHC/microSDHC 0U51USC410	COTS	
CF Card Dual-Slot Reader	Lexar USB 3.0	COTS	
CF Card Reader	Hoodman Steel USB 3.0 102015	COTS	
CF Card Reader	Lexar Professional CFR1	COTS	
CF Card Reader	Kingston FCR-HS4	COTS	
ATI	ATI handset	Proprietary	
ATI	ATI-USB handset	Proprietary	
ACS PC-Linked Smart Card Reader	ACR38U	COTS	
ACS PC-Linked Smart Card Reader	ACR39U	COTS	
HID Global Smart Card Reader	Omnikey 3121		

System Limitations

This table depicts the limits the system has been tested and certified to meet.

Characteristic	Limit by Configuration		Limiting Component
	Express	Standard	
Ballot positions	462**/292*	462**/292*	22-inch Ballot
Precincts in an election	250	1000	Memory
Contests in an election	250	1000	Memory
Candidates/Counters in an election	2500	10000	Memory
Candidates/Counters in a precinct	462**/240*	462**/240*	22-inch Ballot
Candidates/Counters in a tabulator	2500	10000	Memory
Ballot Styles in an election	750	3000	Memory
Contests in a ballot style	156**/38*	156**/38*	22-inch Ballot
Candidates in a contest	231**/240*	231**/240*	22-inch Ballot
Ballot styles in a precinct	5	5	Memory
Number of political parties	30	30	Memory
"Vote for" in a contest	30**/24*	30**/24*	22-inch Ballot
Supported languages in an election	5	5	Memory
Number of write-ins	462**/24*	462**/24*	22-inch Ballot
Ballot positions	462**/292*	462**/292*	22-inch Ballot

* Reflects the system limit for a ballot printed in landscape.

** Reflects the system limit for a ballot printed in portrait.

Functionality

VVSG 1.0 Supported Functionality Declaration

Feature/Characteristic	Yes/No	Comment
Voter Verified Paper Audit Trails		
VVPAT	YES	
Accessibility		
Forward Approach	YES	
Parallel (Side) Approach	YES	
Closed Primary		
Primary: Closed	YES	
Open Primary		
Primary: Open supported)	YES	
Partisan & Non-Partisan:		
Partisan & Non-Partisan: Vote for 1 of N race	YES	
Partisan & Non-Partisan: Multi-member ("vote for N of M") board races	YES	
Partisan & Non-Partisan: "vote for 1" race with a single candidate and write-in voting	YES	
Partisan & Non-Partisan "vote for 1" race with no declared candidates and write-in voting	YES	
Write-In Voting:		
Write-in Voting: System default is a voting position identified for write-ins.	YES	
Write-in Voting: Without selecting a write in position.	NO	
Write-in: With No Declared Candidates	YES	
Write-in: Identification of write-ins for resolution at central count	YES	
Primary Presidential Delegation Nominations & Slates:		
Primary Presidential Delegation Nominations: Displayed delegate slates for each presidential party	YES	
Slate & Group Voting: one selection votes the slate.	YES	
Ballot Rotation:		
Rotation of Names within an Office; define all supported rotation methods for location on the ballot and vote tabulation/reporting	YES	
Straight Party Voting:		
Straight Party: A single selection for partisan races in a general election	YES	
Straight Party: Vote for each candidate individually	YES	
Straight Party: Modify straight party selections with crossover votes	YES	
Straight Party: A race without a candidate for one party	YES	
Straight Party: "N of M race (where "N">1)	YES	
Straight Party: Excludes a partisan contest from the straight party selection	YES	
Cross-Party Endorsement:		

Feature/Characteristic	Yes/No	Comment
Cross party endorsements, multiple parties endorse one candidate.	NO	
Split Precincts:		
Split Precincts: Multiple ballot styles	YES	
Split Precincts: P & M system support splits with correct contests and ballot identification of each split	YES	
Split Precincts: DRE matches voter to all applicable races.	YES	
Split Precincts: Reporting of voter counts (# of voters) to the precinct split level; Reporting of vote totals is to the precinct level	YES	
Vote N of M:		
Vote for N of M: Counts each selected candidate, if the maximum is not exceeded.	YES	
Vote for N of M: Invalidates all candidates in an overvote (paper)	YES	
Recall Issues, with options:		
Recall Issues with Options: Simple Yes/No with separate race/election. (Vote Yes or No Question)	NO	
Recall Issues with Options: Retain is the first option, Replacement candidate for the second or more options (Vote 1 of M)	NO	
Recall Issues with Options: Two contests with access to a second contest conditional upon a specific vote in contest one. (Must vote Yes to vote in 2nd contest.)	NO	
Recall Issues with Options: Two contests with access to a second contest conditional upon any vote in contest one. (Must vote Yes to vote in 2nd contest.)	NO	
Cumulative Voting		
Cumulative Voting: Voters are permitted to cast, as many votes as there are seats to be filled for one or more candidates. Voters are not limited to giving only one vote to a candidate. Instead, they can put multiple votes on one or more candidate.	NO	
Ranked Order Voting		
Ranked Order Voting: Voters can write in a ranked vote.	NO	
Ranked Order Voting: A ballot stops being counting when all ranked choices have been eliminated	NO	
Ranked Order Voting: A ballot with a skipped rank counts the vote for the next rank.	NO	

Feature/Characteristic	Yes/No	Comment
Ranked Order Voting: Voters rank candidates in a contest in order of choice. A candidate receiving a majority of the first choice votes wins. If no candidate receives a majority of first choice votes, the last place candidate is deleted, each ballot cast for the deleted candidate counts for the second choice candidate listed on the ballot. The process of eliminating the last place candidate and recounting the ballots continues until one candidate receives a majority of the vote	NO	
Ranked Order Voting: A ballot with two choices ranked the same, stops being counted at the point of two similarly ranked choices.	NO	
Ranked Order Voting: The total number of votes for two or more candidates with the least votes is less than the votes of the candidate with the next highest number of votes, the candidates with the least votes are eliminated simultaneously and their votes transferred to the next-ranked continuing candidate.	NO	
Provisional or Challenged Ballots		
Provisional/Challenged Ballots: A voted provisional ballots is identified but not included in the tabulation, but can be added in the central count.	YES	
Provisional/Challenged Ballots: A voted provisional ballots is included in the tabulation, but is identified and can be subtracted in the central count	NO	
Provisional/Challenged Ballots: Provisional ballots maintain the secrecy of the ballot.	YES	
Overvotes		
Overvotes: Overvote invalidates the vote.	YES	
Overvotes – DRE / BMD: Prevented from or requires correction of overvoting.	YES	
Overvotes: If a system does not prevent overvotes, define how overvotes are counted.	YES	If allowed via voter override, overvotes are tallied separately.
Undervotes		
Undervotes: System counts undervotes cast for accounting purposes	YES	
Blank Ballots		
Totally Blank Ballots: Any blank ballot causes an alert.	YES	Precinct voters receive a warning; both precinct and central scanners will warn on blank ballots.

Feature/Characteristic	Yes/No	Comment
Totally Blank Ballots: If blank ballots are not immediately processed, there must be a provision to recognize and accept them	YES	Blank ballots are flagged. These ballots can be manually examined and then be scanned and accepted as blank; or precinct voter can override and accept.
Totally Blank Ballots: If operators can access a blank ballot, there must be a provision for resolution.	YES	Operators can examine a blank ballot, re-mark if needed and allowed, and then re-scan it.
Networking		
Wide Area Network – Use of Modems	NO	
Wide Area Network – Use of Wireless	NO	
Local Area Network – Use of TCP/IP	YES	Client/server only
Local Area Network – Use of Infrared	NO	
Local Area Network – Use of Wireless	NO	
FIPS 140-2 validated cryptographic module	YES	
Used as (if applicable):		
Precinct counting device	YES	ImageCast Precinct ImageCast Precinct 2 ImageCast Evolution ImageCast X DRE
Central counting device	YES	ImageCast Central

Baseline Certification Engineering Change Orders (ECO)

ECO #	Description
100706	Adjusted resistor value for paper sensor LED output
100718	Added Dell Precision 3440 XE EMS Express Server
100719	Added Dell Precision 3440 XE EMS-ADJ Workstation
100720	Added Dell Precision 3440 XE ICC Canon Workstation
100721	Added Dell OptiPlex XE3 ICC Hi Pro Workstation
100741	Added Dell Latitude 3410 ICVA Workstation
100755	Added Cisco 24-port Switch (CBS350-24T-4G) Network Switch
100756	Added Cisco 8-port Switch (CBS350-8T-E-2G) Network Switch
100762	Added alternate supplier for the ICP2 LCD-Touch Panel assembly
100763	Added termination resistors to unused lines on the ICE Main Controller Board
100769	Added Dell Latitude 3410 with 512GB SSD Drive for ICVA Workstation
100772	Added Dell Latitude 3420 ICVA Workstation
100802	Added new ICP2 printer door that captures the printer platen roller onto the door
100803	Added new ICE DDR Memory Module
100812	Added alternate supplier for the ICE LCD-Touch Panel assembly
100819	Added new ICP2 Printer Controller Chip vendor
100826	ICP Provisional Flag Modification (5.5-B)
100827	ICP Provisional Flag Modification (5.5-C)
100829	Added Dell Precision 3450 XE EMS Express Server
100830	Added Dell Precision 3450 XE EMS-ADJ Client Workstation
100831	Added Dell Precision 3450 XE ICC Canon Workstation
100832	Added Lenovo 11GCPAR1US Touchscreen monitor for HiPro
100833	ICX Prime BIOS 1.40C Update
100843	Removal of ICP2 Ethernet Port
100845	Removal of ICE Ethernet Port
100849	Added New Centon 8GB SDHC Card - BiCS4
100850	Added New Centon 8GB microSD Memory Card -BiCS4