

#### **United States Election Assistance Commission**

### Certificate of Conformance



### **ES&S EVS 6.1.1.0**

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: EV	7S	
Model or Version:	6.1.1.0	
Name of VSTL:	Pro V&V	Mona Harrington
EAC Certification I	Number: ESSEVS6110	Executive Director

Date Issued: July 27, 2020 Scope of Certification Attached

Manufacturer: Election Systems & Software

**System Name:** *EVS 6.1.1.0* **Certificate:** *ESSEVS6110* 

**Laboratory:** *Pro V&V* **Standard:** 2005 VVSG **Date:** 07/23/2020



# 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 ES&S EVS 6.1.1.0 (EVS6110) voting system is a modification of the EVS 6.1.0.0 voting system, certified on September 24, 2019. EVS6110 introduces multiple performance and optimization improvements for Electionware.

EVS6110 includes the following hardware: ExpressTouch™ Electronic Universal Voting System, ExpressVote® Universal Voting System, ExpressVote® Universal Voting System hardware 1.0, ExpressVote® Universal Voting System hardware 2.1, DS450® High-Throughput Central Tabulator, DS850® High-Speed Central Tabulator and DS200® Precinct-Based Tabulator.

Electionware® election management software is an end-to-end election management software

application that provides election definition creation, ballot formation, equipment configuration, result consolidation, adjudication, and report creation. Electionware is composed of five software groups: Define, Design, Deliver, Results, and Manage.

**ExpressVote XL™** is a hybrid paper-based polling place voting device that provides a full-faced touch screen vote capture interface that incorporates the printing of the voter's selections as a cast vote record and tabulation scanning in a single unit.

**ExpressTouch**® is a DRE voting system which supports electronic vote capture for curbside voting at the polling place.

**ExpressVote® Hardware 1.0** is a hybrid paper-based polling place voting device that provides touch screen vote capture that incorporates the printing of the voter's selections as a cast vote record to be scanned for tabulation in any one of the ES&S precinct or central scanners.

**ExpressVote® Hardware 2.1** is a hybrid paper-based polling place voting device that provides touch screen vote capture that incorporates the printing of the voter's selections as a cast vote record to be scanned for tabulation in any one of the ES&S precinct or central scanners.

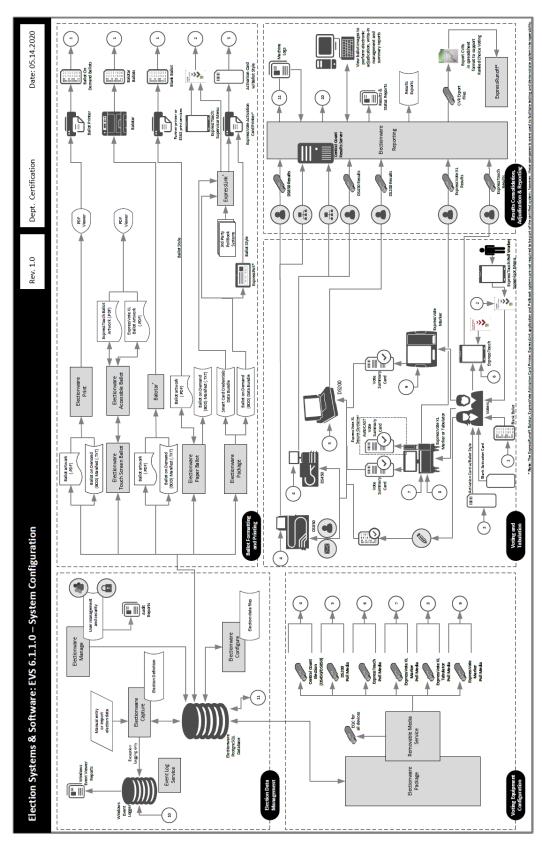
**DS200**® is a polling place paper-based voting system, specifically a digital scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic cast vote records (CVR).

**DS450**® is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

**DS850**® is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

**Event Log Service (ELS)** monitors and logs users' interactions with the election management system. Events that happen when a connection to the database is not available are logged to the Windows operating system log through the ELS.

**Removable Media Service (RMS)** is a utility that runs in the background of the Windows operating system. RMS reads specific information from any attached USB devices so that an ES&S application such as Electionware can use that information for media validation purposes.



Certified System before Modification (<a href="If applicable">If applicable</a>):

### Changes addressed by modification

#### Software/Firmware

### **Cross-Product Changes**

Security Enhancements

Added critical Windows security updates available at the time of certification testing.

Impacted products: Election Management System

#### Arial Fonts

Included the recommended Arial fonts, which allows states to have better flexibility for ballot/election layout.

Impacted products: Election Management System

#### Increased RAM Potential

Provided the option for increased physical RAM on the EMS in the client, server and/or standalone configurations (optional). Increased the amount of virtual RAM available to Electionware (optional).

Impacted products: Election Management System

Modified Password Policy

Provided a method for modifying the Microsoft Windows password policy to not expire on the EMS (optional).

Impacted products: Election Management System

#### <u>Electionware</u>

### Adjudication

- Added an updated JAR file to prevent relocated JAI classes from loading. This
  prevents the Internal Error displayed when attempting to view ExpressVote XL
  write-in images.
- Adjusted misalignment of write-in snippets for ExpressVote XL and
   ExpressVote vote summary cards so they reflect the correct ballot image.
- Provided an additional user logging message to enhance the transparency and security of the database. This additional logging is included within the Reporting module to assist users during ballot adjudication.
- Performance Improvement

o Provided an additional internal Postgres system logging message to enhance the security and performance of the database. This additional logging is included within the internal Postgres logging for analytical, internal traceability and allows for further indexing for added performance

### • Exports/Reporting

o Removed all empty entries in the CVR export report.

### **Mark Definition**

ES&S' declared mark recognition for the DS200, DS450, and DS850 is a mark across the oval that is 0.02" long x 0.03" wide at any direction.

### **Tested Marking Devices:**

Bic Grip Roller Pen

### Language Capability

System supports English, Spanish, Chinese, Korean, Japanese, Hindi, Bengali, Vietnamese, Tagalog, Creole, Russian, French. In addition, Punjabi and Gujarati are supported by ExpressVote XL and Electionware only.

## **Proprietary Components Included**

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

	Software or			
System Component	Firmware	Hardware	Model	Comments
System Component		Version	iviodei	Comments
	Version			
Electionware	6.0.1.0			Election management software
				that provides end-to-end election
ES&S Event Log	2.0.0.0			management activities  Logs users' interactions with EMS
=	2.0.0.0			Logs users interactions with Livis
Service (ELS)	2000			
Removable Media	2.0.0.0			Utility that runs in the
Service				background of the Windows
DS200	2.30.0.0	1.2, 1.3		operating system  Precinct count tabulator that
D3200	2.30.0.0	1.2, 1.3		scans voter selections from both
				sides of the ballot simultaneously
DS200 Ballot Box		1.0, 1.1	98-00009	Collapsible ballot box
DS200 Ballot Box		1.2, 1.3, 1.4,	57521	Plastic ballot box
		1.5		
DS200 Tote Bin		1.0	00074	Tote bin ballot box
DS200 Fold Bill DS200 Ballot Trolley		1.0	60	Rolling bag for transporting
Bozoo Banot Froncy			00	scanned ballots (optional)
DS200 Ballot Tote			212516	Bag for transporting scanned
Bag				ballots (optional)
DS450	3.4.0.0	1.0		Central count scanner and
				tabulator
DS450 Cart			3002	
DS850	3.4.0.0	1.0		Central count scanner and
				tabulator
DS850 Cart			6823	
ExpressVote XL	1.0.3.0	1.0		Hybrid full-faced paper-based
				vote capture and selection device
ExpressTouch	1.0.3.0	1.0		and precinct count tabulator  DRE
ExpressVote HW1.0	4.0.0.0	1.0		Hybrid paper-based vote capture
Expressvote rivii.o	4.0.0.0	1.0		and selection device
ExpressVote HW2.1	4.0.0.0	1.0		Hybrid paper-based vote capture
				and selection device
- V - 5 III		1.0	00.00040	
ExpressVote Rolling		1.0	98-00049	Portable Voting Booth
Kiosk				
Voting Booth			98-00051	Stationary Voting Booth
Voting Booth			87035	Stationary voting booth
Workstation				
Quad Express Cart			41404	Portable Voting Booth
MXB ExpressVote			95000	Sitting and Standing Voting Booth
Voting Booth				
ExpressVote Single			87033	Voting Table for One Unit
Table				

System Component	Software or Firmware Version	Hardware Version	Model	Comments
ExpressVote Double			87032	Voting Table for Two Units
Table				
ADA Table			87031	Voting Table for One Unit
Universal Voting		2.0	98-00077	Detachable ADA support
Console (UVC)				peripheral
Tabletop Easel			14040	Portable Voting Booth
ExpressTouch Voting			98-00081	Stationary Voting Booth
Booth				
SecureSetup	3.0.0.2			Proprietary Hardening Script

## **COTS Software**

Manufacturer	Application	Version
Microsoft Corporation	Windows Server 2016	(64-bit)
Microsoft Corporation	Windows 10 Enterprise LTSC	SP1 (64-bit)
Microsoft Corporation	WSUS Microsoft Windows	11.6.1
	Offline Update Utility	
Microsoft Corporation	January 2020 Security Rollup	windows10.0-kb4534273-
	for Windows 10	x64_74bf76bc5a941bbbd0052caf5c3f
		956867e1de38.msu
Microsoft Corporation	January 2020 Security Rollup	windows10.0-kb4534271-
	for Server 2016	x64_a009e866038836e277b167c85c5
		8bbf1e0cc5dc8.msu
Microsoft Corporation	January 2020 Security Rollup	windows10.0-kb4520724-
	for Server 2016 - Servicing	x64_97604f0b532d6da814b4120fc43
	Stack Update	b2d9f6fd0b356.msu
Symantec	Endpoint Protection	14.2.0_MP1 (64-bit)
Symantec	Endpoint Protection Intelligent	20190329-001-core15sdsv5i64.exe
	Updater (File-based protection)	
Symantec	Endpoint Protection Intelligent	20190328-061-IPS_IU_SEP_14RUI.exe
	Updater (Network-based	
	protection)	
Symantec	Endpoint Protection Intelligent	20190325-001-SONAR_IU_SEP.exe
	Updater (Behavior-based	
	protection)	
Amyuni	PDF Converter Printer Driver	5.5
Cerberus	FTP Server – Enterprise	10.0.8 (64-bit)
Sumatra	PDF	3.1.2 (64-bit)
RSA Security	BSAFE Crypto-C ME for	4.1
	Windows 32-bit	

## **COTS Hardware**

Manufacturer	Hardware	Model/Version
Dell	EMS Server	PowerEdge T430, T630
Dell	EMS Client or Standalone	Latitude 5580, OptiPlex 5040, 5050, 7020
	Workstation	
Dell	Trusted Platform Module	M48YR
	(TPM) Chip 1.2 and 2.0	
	(optional)	

Manufacturer	Hardware	Model/Version
Innodisk	USB EDC H2SE (8GB) for	DEEUH1-01GI72AC1SB
	ExpressVote 1.0	
Innodisk	USB EDC H2SE (16GB) for	DEEUH1-16GI72AC1SB
	ExpressVote 2.1	
Delkin	USB Embedded 2.0 Module	MY08TQJ7A-RA000-D / 8GB
	Flash Drive	
Delkin	USB Embedded 2.0 Module	MY16TNK7A-RA042-D/ 16 GB
	Flash Drive	
Delkin	USB Flash Drive (512MB, 1GB,	N/A
	2GB, 4GB, 8GB)	
Delkin	Compact Flash Memory Card	CE0GTFHHK-FD038-D
	(1GB)	
Delkin	Secure Compact Flash Card	CE02TLQCK-FD000-D
	(2GB)	
Delkin	Compact Flash Memory Card	6381
	Reader/Writer	
Delkin	CFAST Card (2GB, 4GB)	N/A
Delkin	USB Flash Drive BitLocker 32.2	N/A
	MB Storage for Security Key	
	(optional)	LDWCDATDWA
Lexar	CFAST Card Reader/Writer	LRWCR1TBNA
CardLogix	Smart Card	CLXSU128kC7/ AED C7
SCM Microsystems	Smart Card Writer	SCR3310
Avid	Headphones	86002
Zebra Technologies Symbol	QR Code Scanner (integrated)  QR Code Scanner (external)	DS457-SR20009, DS457-SR2000ZZWW DS9208
Dell	DS450 Report Printer	S2810dn
OKI	DS450 Report Printer  DS450 and DS850 Report	B431DN, B431D, B432DN
OKI	Printer	D431DIN, D431D, D432DIN
OKI	DS450 and DS850 Audit Printer	Microline 420
APC	DS450 UPS	Back-UPS Pro 1500, Smart-UPS 1500
APC	DS850 UPS	Back-UPS RS 1500, Pro 1500
Tripp Lite	DS450 Surge Protector	Spike Cube
Seiko Instruments	Thermal Printer	LTPD-347B
NCR/Nashua	Paper Roll	2320
Fujitsu	Thermal Printer	FTP-62GDSL001, FTP-63GMCL153
НР	Ink Cartridge for DS450/DS850	87002
	Ballot Number Imprinting	
TDS	Ink Cartridge for DS200 Ballot	2278
	Number Imprinting	

## **System Limitations**

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

System Characteristic	Boundary or Limitation	Limiting Component	
Max. precincts allowed in an election	9,900	Electionware	
Max. candidates allowed per election	10,000	Electionware	
Max. contests allowed in an election	10,000	Electionware	
Max. contests allowed per ballot style	500 or # of positions on ballot	N/A	

System Characteristic	Boundary or Limitation	Limiting Component
Max. candidates (ballot choices) allowed per contest	230	Electionware
	General election: 75	Electionware
Max. number of parties allowed	Primary election: 30 (including	
	nonpartisan party)	
Max. 'vote for' per contest	230	Electionware
	All paper ballots used in an	Ballot scanning equipment
	election must be the same	
Ballot formats	length. Voteable paper ballots	
	must contain the same number	
	of rows	
Max. ballot styles	15,000	Electionware
Max. ballots per batch	1,500	DS450/DS850
Max. precinct types/groups	25 (arbitrary)	Electionware
Max. precincts of a given type	250 (arbitrary)	Electionware
Max. reporting groups	14	Electionware

### **Component Limitations**

#### **ExpressVote**

- Capacities exceed all documented limitations for the ES&S election management, vote tabulation and reporting system. For this reason, election management system and ballot tabulator limitations define the boundaries and capabilities of the ExpressVote system as the maximum capacities of the ExpressVote are never approached during testing.
- 2. Does not offer primary support based on the ES&S definition of Open Primary, which is the ability to select a party and vote based on that party.
- 3. Does not support Massachusetts Group Vote.
- 4. Does not support Universal Primary Contest.
- 5. Does not support Multiple Target Cross Endorsement.
- 6. Does not support Reviewer or Judges Initials boxes.
- 7. Does not support multi-card ballots.
- 8. Does not support Team Write-in.

#### ExpressVote XL

- Capacities exceed all documented limitations for the ES&S election management, vote tabulation and reporting system. For this reason, election management system and ballot tabulator limitations define the boundaries and capabilities of the ExpressVote XL system as the maximum capacities of the ExpressVote XL are never approached during testing.
- 2. Does not offer primary support based on the ES&S definition of Open Primary, which is the ability to select a party and vote based on that party.
- 3. Does not support Massachusetts Group Vote.
- 4. Does not support Universal Primary Contest.

- 5. Does not support Multiple Target Cross Endorsement.
- 6. Does not support Reviewer or Judges Initials boxes.
- 7. Does not support multi-card ballots.
- 8. In a general election, ExpressVote XL screen can hold 32 party columns if set up as columns or 16 party rows if set up as rows.
- 9. Does not support Team Write-in.

### ExpressTouch

- 1. Capacities exceed all documented limitations for the ES&S election management, vote tabulation and reporting system. For this reason, election management system limitations define the boundaries and capabilities of the ExpressTouch system as the maximum capacities of the ES&S ExpressTouch are never approached during testing.
- 2. Does not offer open primary support based on the ES&S definition of Open Primary, which is the ability to select a party and vote based on that party.
- 3. Does not support Massachusetts Group Vote.
- 4. Does not support Universal Primary Contest.
- 5. Does not support Multiple Target Cross Endorsement.
- 6. Does not support Team Write-in.

#### Electionware

- Electionware software field limits were calculated based on an average character width
  for ballot and report elements. Some uses and conditions, such as magnified ballot
  views or combining elements on printed media or ballot displays, may result in field
  limits (and associated warnings) lower than those listed. Check printed media and
  displays before finalizing the election.
- 2. Ballot Images function is limited to 250 districts per export.
- 3. Support the language and special characters listed above in Supported Languages section. Language special characters other than those on this list may not appear properly when viewed on equipment displays or reports.
- 4. The Straight Party feature must not be used in conjunction with the Multiple Target Cross Endorsement features.
- 5. The 'MasterFile.txt' and the 'Votes File.txt' do not support results for elections that contain multiple sheets or multiple ExpressVote cards per voter. These files can be produced using the Electionware > Reporting > Tools > Export Results menu option. This menu option is available when the Rules Profile is set to "Illinois".

#### **Electionware Paper Ballot**

1. The paper ballot code channel, which is the series of black boxes that appear between the timing track and ballot contests, limits the number of available ballot variations depending on how a jurisdiction uses this code to differentiate ballots. The code can be used to differentiate ballots using three different fields defined as: Sequence (available codes 1-16,300), Type (available codes 1-30), or Split (available codes 1-18).

- 2. For paper ballots, if Sequence is used as a ballot style ID, it must be unique election-wise and Split code will always be 1. In this case, the practical style limit would be 16,300.
- 3. The ExpressVote activation card has a ballot ID consisting of three different fields defined as: Sequence (available codes 1-16,300), Type (available codes 1-30), or Split (available codes 1-18).
- 4. Grid Portrait and Grid Landscape ballot types are New York specific and not for general use.

#### **DS200**

- 1. Configured for an early vote station does not support precinct level results reporting. An election summary report of tabulated vote totals is supported.
- 2. Storage limitation for write-in ballot images is 3,600 images. Each ballot image includes a single ballot face, or one side of one page.
- 3. Write-in image review requires a minimum 1GB of onboard RAM.
- 4. To successfully use the write-in report, ballots must span three or more vertical columns. If the column is greater than 1/3 of the ballot width (two columns or less), the write-in image will be too wide to print on the tabulator report tape.

### **Functionality**

### 2005 VVSG Supported Functionality Declaration

Feature/Characteristic	Yes/No	Comment
Voter Verified Paper Audit Trails		
VVPAT	No	
Accessibility		
Forward Approach	Yes	
Parallel (Side) Approach	Yes	
Closed Primary		
Primary: Closed	Yes	
Open Primary		
Primary: Open Standard (provide definition of how supported)	No	
Primary: Open Blanket (provide definition of how supported)	No	
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	Yes	
write-in voting		
Partisan & Non-Partisan "vote for 1" race with no declared candidates	Yes	
and write-in voting		
Write-In Voting:		
Write-in Voting: System default is a voting position identified for write-	Yes	
ins.		
Write-in Voting: Without selecting a write in position.	Yes	
Write-in: With No Declared Candidates	Yes	
Write-in: Identification of write-ins for resolution at central count	Yes	

Feature/Characteristic	Yes/No	Comment
Primary Presidential Delegation Nominations & Slates:		
Primary Presidential Delegation Nominations: Displayed delegate slates	No	
for each presidential party		
Slate & Group Voting: one selection votes the slate.	No	
Ballot Rotation:		
Rotation of Names within an Office; define all supported rotation	Yes	
methods for location on the ballot and vote tabulation/reporting		
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	Yes	
selection		
Cross-Party Endorsement:		
Cross party endorsements, multiple parties endorse one candidate.	Yes	
Split Precincts:		
Split Precincts: Multiple ballot styles	Yes	
Split Precincts: P & M system support splits with correct contests and	Yes	
ballot identification of each split		
Split Precincts: DRE matches voter to all applicable races.	Yes	
Split Precincts: Reporting of voter counts (# of voters) to the precinct split	Yes	It is possible to list the
level; Reporting of vote totals is to the precinct level		number of voters.
Vote N of M:		
Vote for N of M: Counts each selected candidate, if the maximum is not	Yes	
exceeded.		
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.	No	
(Vote Yes or No Question)		
Recall Issues with Options: Retain is the first option, Replacement	No	
candidate for the second or more options (Vote 1 of M)		
Recall Issues with Options: Two contests with access to a second contest	No	
conditional upon a specific vote in contest one. (Must vote Yes to vote in		
2 <sup>nd</sup> contest.)		
Recall Issues with Options: Two contests with access to a second contest	No	
conditional upon any vote in contest one. (Must vote Yes to vote in 2 nd		
contest.)		
Cumulative Voting		
Cumulative Voting: Voters are permitted to cast, as many votes as there	No	
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.		
Ranked Order Voting		

Feature/Characteristic	Yes/No	Comment
Ranked Order Voting: Voters can write in a ranked vote.	Yes	Ballots can be
		formatted for Ranked
		Order Voting and the
		system supports export
		of CVR data for
		processing of Ranked
		Order Voting Rounds
Ranked Order Voting: A ballot stops being counted when all ranked	Yes	Ballots can be
choices have been eliminated		formatted for Ranked
		Order Voting and the
		system supports export
		of CVR data for
		processing of Ranked
		Order Voting Rounds
Ranked Order Voting: A ballot with a skipped rank counts the vote for the	Yes	Ballots can be
next rank.		formatted for Ranked
		Order Voting and the
		system supports export
		of CVR data for
		processing of Ranked
		Order Voting Rounds
Ranked Order Voting: Voters rank candidates in a contest in order of	No	Order voting Rounds
choice. A candidate receiving a majority of the first choice votes wins. If	110	
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		
Ranked Order Voting: A ballot with two choices ranked the same, stops	Yes	Ballots can be
being counted at the point of two similarly ranked choices.	163	formatted for Ranked
being counted at the point of two similarly ranked choices.		Order Voting and the
		system supports export of CVR data for
		processing of Ranked
Panked Order Veting: The total number of vetes for two as seen	No	Order Voting Rounds
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	No	
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.		
Provisional or Challenged Ballots	Vas	
Provisional/Challenged Ballots: A voted provisional ballots is identified	Yes	
but not included in the tabulation, but can be added in the central count.	V-	
Provisional/Challenged Ballots: A voted provisional ballots is included in	Yes	
the tabulation, but is identified and can be subtracted in the central		
count		

Feature/Characteristic	Yes/No	Comment
Provisional/Challenged Ballots: Provisional ballots maintain the secrecy of the ballot.	Yes	
Overvotes (must support for specific type of voting system)		
Overvotes: P & M: Overvote invalidates the vote. Define how overvotes	Yes	
are counted.		
Overvotes: DRE: Prevented from or requires correction of overvoting.	Yes	
Overvotes: If a system does not prevent overvotes, it must count them.	Yes	
Define how overvotes are counted.		
Overvotes: DRE systems that provide a method to data enter absentee	Yes	
votes must account for overvotes.		
Undervotes		
Undervotes: System counts undervotes cast for accounting purposes	Yes	
Blank Ballots		
Totally Blank Ballots: Any blank ballot alert is tested.	Yes	
Totally Blank Ballots: If blank ballots are not immediately processed,	Yes	
there must be a provision to recognize and accept them		
Totally Blank Ballots: If operators can access a blank ballot, there must be	Yes	
a provision for resolution.		
Networking		
Wide Area Network – Use of Modems	No	
Wide Area Network – Use of Wireless	No	
Local Area Network – Use of TCP/IP	No	
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	DS200, ExpressTouch, ExpressVote XL
Central counting device	Yes	DS450 and/or DS850

## Baseline Certification Engineering Change Orders (ECO)

This table depicts the ECOs certified with the voting system:

Change ID	Date	Component	Description	Inclusion
ECO 1029	9/24/19	ExpressVote	Upgrade to 8GB Innodisk on EV 1.0	DeMinimis
				Optional
ECO 1034	10/28/19	ExpressVote Voting Booth	Enhanced Voting Booth	DeMinimis
				Optional
ECO 1035	2/13/20	DS200	Improve thermal stability and higher	DeMinimis
			resolution calibration characteristics.	Optional
ECO 1041	10/28/19	ExpressVote XL	Add brace to Wheel Struts	DeMinimis
				Optional
ECO 1043	10/30/19	ExpressVote	Add 16G Innodisk to EV 1.0	DeMinimis
				Optional
ECO 1044	9/13/19	DS200 Ballot Tote	Add ballot Tote Bag	DeMinimis
				Optional
ECO 1047	2/28/20	ExpressVote XL	Aesthetic changes, modifications to	DeMinimis
			cart and curtain hardware.	Optional
ECO 1054	02/14/20	ExpressVote/ExpressVote	Update Ballot Bin	DeMinimis
		XL		Optional
ECO 1055	12/19/19	DS200 Ballot Bin tote	Add Ballot Tote Bag	DeMinimis
				Optional