

**ESS Model 650
Engineering Change Order List
Arizona Secretary of State Office
September 2011**

ES&S ECO #	Description of Change	VSTL Resolution	VSTL Test Report Reference	VSTL Approval Date
667	Hardware Modification - Addition of resistor to the PMS (Pick Motor Signal) board. Location of the resistor is at location R8.	De Minimis	ECO667_VSTL Approval.pdf	2/2/2006
669	Assembly Change - Changed the length of the wiring that is stripped and tinned from 1/4" to 1/8" to eliminate a step during the assembly of the Model 650.	De Minimis	ECO669_VSTL Approval.pdf	2/24/2006
677	Label Clarification - Addition of two labels to identify visible red and visible green read head sensors.	De Minimis	ECO677_VSTL Approval.pdf	4/20/2006
689	Label Clarification - Initial release of the M650 hardware revision label	De Minimis	ECO689_VSTL Approval.pdf	3/26/2007
696	End-of-Life Component - SANDISK 128MB will be replaced with the SANDISK 512MB CF Card and response board.	Tested	ECO696_VSTL Approval.pdf	9/25/2007
716	End-of-Life Components - 1.) Epson LQ-590 Printer replacement for the Okidata ML520 (See ECO 718); 2.) Belkin 1500VA UPS replacement for the APS UPS (See ECO 827); 3.) Modified components on the PMS (Pick Motor Signal) Board.	Tested	ECO716_VSTL Approval.pdf	8/9/2007
718	End-of-Life Component - Epson LQ-590 Printer replaces the Okidata ML420 which is no longer available.	Tested	ECO718_VSTL Approval.pdf EMC R071107-30-2.pdf	8/9/2007
731	Drawing Clarification - Added Hardware Revision Label to M650 Unit	De Minimis	ECO731_VSTL Approval.pdf	3/24/2008
757	End-of-Life Component - Adding the SANDISK 1GB compact flash	De Minimis	ECO757_VSTL Approval.pdf	5/21/2008
827	End-of-Life Component - Replacement of Belkin 1500VA to an APC1500VA	De Minimis	ECO827_VSTL Approval.pdf	6/17/2009
855	Alternative Manufacturer - Added FujiFilm 250MB zip disks as an alternative manufacturer	De Minimis	ECO855_VSTL Approval.pdf	3/29/2011

NOTE: Engineering Change Orders (ECOs) are applied to the hardware levels of a particular component of a voting system (Model 650). ECOs are independent of firmware levels and/or voting systems such as Unity 3.0.1.1 or Unity 3.2.1.0. Some of the documentation provided with the aforementioned ECOs mention particular Unity suites however Election Systems and Software's ECOs are only applied to a particular hardware level and in many cases are relevant to several Unity suites. The ECOs above are relevant to the Model 650 hardware level 1.1 and is hereby included in the re-certification and administrative approval of the Model 650 with use in the Unity 3.0.1.1 voting system.



STATE OF ARIZONA
VOTING EQUIPMENT CERTIFICATION
FORM 2-B Modifications to Voting System
RECERTIFICATION ONLY

Voting System		Date of Previous Certification:	
UNITY	3.0.1.1	NASED Qualified	
Name	Version Number	N-2-02-22-22-006	
		EAC System Number	

Components		
Model 650	Hardware version 1.1	SysTest Labs
Name	Version Number	VSTL Testing Authority
Describe Modification or Attach Documentation		
ECO 667 [ECO667_Original Doc.pdf]		
Description: Hardware Modification - Addition of Resistor to the PMS (Pick Motor Signal) board. Location of the resistor is at location R8.		
VSTL Determination: DeMinimis 02/02/2006 [ECO667_VSTL Approval.pdf]		
Model 650	Hardware version 1.1	SysTest Labs
Name	Version Number	VSTL Testing Authority
Describe Modification or Attach Documentation		
ECO 669 [ECO669_Original Doc.pdf]		
Description: Assembly Changes - Changed the length of the wiring that is stripped and tinned from 1/4" to 1/8" to eliminate a step during the assembly of the Model 650.		
VSTL Determination: DeMinimis 02/24/2006 [ECO669_VSTL Approval.pdf]		
Model 650	Hardware version 1.1	SysTest Labs
Name	Version Number	VSTL Testing Authority
Describe Modification or Attach Documentation		
ECO 677 [ECO677_Original Doc.pdf]		
Description: Label Clarification - Created two labels to identify visible red and visible green sensors. Label is placed on unit for customers to be able distinguish which sensors are in their unit without turning them on.		
VSTL Detmination: DeMinimis 04/20/2006 [ECO677_VSTL Approval.pdf]		



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Voting System	Date of Previous Certification:	
UNITY Name	3.0.1.1 Version Number	NASED Qualified N-2-02-22-22-006 EAC System Number

Components		
Model 650 Name	Hardware version 1.1 Version Number	SysTest Labs VSTL Testing Authority
Describe Modification or Attach Documentation		
<p>ECO 689 [ECO689_Original Doc.pdf]</p> <p>Description: Label Creation - Initial release of the M650 Hardware Revision Label.</p> <p>VSTL Determination: DeMinimis 03/26/2007 [ECO689_VSTL Approval.pdf]</p>		
Model 650 Name	Hardware version 1.1 Version Number	SysTest Labs VSTL Testing Authority
Describe Modification or Attach Documentation		
<p>ECO 696 [ECO696_Original Doc.pdf]</p> <p>Description: End-of-Life Component - SanDisk 128MB will be replaced with the 512MB compact flash card and response board. The 'Compact Flash Pics.pdf' displays the obsolete and the replacement cards and board well. ECO 696 was fully tested and the results can be found in the EMC Test Report (071107-30-02).</p> <p>VSTL Determination: Tested and Approved 09/25/2007 [ECO 696_VSTL Approval.pdf]</p>		



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Voting System	Date of Previous Certification:	
UNITY <small>Name</small>	3.0.1.1 <small>Version Number</small>	NASED Qualified N-2-02-22-22-006 EAC System Number

Components		
Model 650 <small>Name</small>	Hardware version 1.1 <small>Version Number</small>	SysTest Labs VSTL Testing Authority
<p style="text-align: center;"><small>Describe Modification or Attach Documentation</small></p> <p>ECO 716 [ECO716_Original Doc.pdf]</p> <p>Description: End-of-Life Components: Replacement of the Okidata ML520 Printer with the Epson LQ-590 Printer; Changed from the APS UPS to the BELKIN 1500VA USB (Back-up power); and modifications to the PMS (Pick Motor Signal) Board to assist in manufacturing of a unit. [Test Report: EMC R071107-30-02.pdf]</p> <p>VSTL Determination: Tested and Approved 08/09/2007 [ECO716_VSTL Approval.pdf]</p>		
Model 650 <small>Name</small>	Hardware version 1.1 <small>Version Number</small>	SysTest Labs VSTL Testing Authority
<p style="text-align: center;"><small>Describe Modification or Attach Documentation</small></p> <p>ECO 718 [ECO718_Original Doc.pdf]</p> <p>Description: End-of-Life Component - Replacing the Okidata ML420 with the EPSON LQ-590. The Okidata ML420 is obsolete and no longer available. [Test Report: R071107-30-02.pdf]. (ECO is related to ECO 716)</p> <p>VSTL Determination: Tested and Approved 08/09/07 [ECO718_VSTL Approval.pdf]</p>		
Model 650 <small>Name</small>	Hardware version 1.1 <small>Version Number</small>	SysTest Labs VSTL Testing Authority
<p style="text-align: center;"><small>Describe Modification or Attach Documentation</small></p> <p>ECO 731 [ECO731_Original Doc.pdf]</p> <p>Description: Drawing Clarification - Added Hardware Revision Label to M650 Unit</p> <p>VSTL Determination: DeMinimis 03/24/2008 [ECO731_VSTL Approval.pdf]</p>		



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Voting System	Date of Previous Certification:	
UNITY Name	3.0.1.1 Version Number	NASED Qualified N-2-02-22-22-006 EAC System Number

Components		
Model 650 Name	Hardware version 1.1 Version Number	SysTest Laboratories VSTL Testing Authority
Describe Modification or Attach Documentation		
ECO 757 [ECO757_Original Doc.pdf] Description: Availablity - Added the SANDISK 1GB compact flash card due to obsolescence of smaller capacity cards. VSTL Determination: DeMinimis 5/21/2008 [ECO757_VSTL Approval.pdf]		
Model 650 Name	Hardware version 1.1 Version Number	iBeta Quality Assurance VSTL Testing Authority
Describe Modification or Attach Documentation		
ECO 827 [ECO827_Original Doc.pdf] Description: End-of-Life - Belkin 1500VA is obselete and is equivalent to the APC 1500VA. VSTL Determination: DeMinimis 06/17/2009 [ECO 827_VSTL Approval.pdf]		
Model 650 Name	Hardware version 1.1 Version Number	Wyle Laboratories VSTL Testing Authority
Describe Modification or Attach Documentation		
ECO 855 [ECO855_Original Doc.pdf] Description: Alternative Manufacturer - Addition of Fujifilm as an alternative manufacture for the 250MB zip disk used in the Model 650. VSTL Determination: DeMinimis 03/29/2011 [ECO855_VSTL Approval.pdf]		