IntelliTouch®
Surface Acoustic Wave Touchscreen Specifications
Revision: A
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Change History			
Rev.	**Description of Change**	**Release Date**	**Changed By**
1	First Version A	07/13/16	

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1. Description

The Elo Touch Solutions IntelliTouch touchscreen technology is a surface acoustic wave (SAW) system that delivers a sensitive, accurate one or two interactive experience. Now powered by eSAW, it responds to light touches in a seamless, bezeled or zero-bezel design.

2. Screen Specifications

Part #	Model #	Diagonal Size (in)	Aspect Ratio	Outer Dimensions (mm)	Active Area (mm)	Controller
E759737	SCN-IT-FLT06.4-001-003-R	10.4	4:3	243.8x186.7	214.9 x 158.5	2521, 2701, 3200
E116381	SCN-IT-FLT10.4-0B4-003-R	10.4	4:3	252.5x209.8	211.3 x 158.5	2521, 2701, 3200
E164869	SCN-IT-FLT12.1-002-004-F-R	12.1	4:3	281.9x222.3	246.1 x 184.4	2521, 2701, 3200
E072176	SCN-IT-FLT15.0-001-003-R	15	4:3	348x276.9	308.1 x 232.2	2521, 2701, 3200
E449313	SCN-IT-FLT15.0-004-009-B-R	15	4:3	326.1x254	305.8 x 229.62	2521, 2701, 3200
E653705	SCN-IT-FLT15.0-005-009-B-R	15	4:3	326.1x254	305.8 x 229.62	2521, 2701, 3200
E286784	SCN-IT-FLT15.0-007-004-R	15	4:3	356.1x264.2	304.1 x 228.1	2521, 2701, 3200
E414279	SCN-IT-FLT15.1-004-003-R	15.1	4:3	356.1x264.2	308.6 x 231.6	2521, 2701, 3200
E853800	SCN-IT-FLT17.0-005-008-B-R	17	5:4	357.8x295.5	336.9 x 269.7	2521, 2701, 3200
E894441	SCN-IT-FLT17.0-005-009-B-R	17	5:4	357.8x295.5	336.9 x 269.7	2521, 2701, 3200
E669259	SCN-IT-FLT17.0-006-004-R	17	5:4	371.9x309.9	337.8 x 270.3	2521, 2701, 3200
E294191	SCN-IT-FLT19.0-002-001-R	19	4:3	414.5x338.6	379.48 x 304.3	2521, 2701, 3200
E259081	SCN-IT-FLT19.0-003-009-B-R	19	4:3	403.6x328.9	380.2 x 305.1	2521, 2701, 3200
E634359	SCN-IT-FLT20.1-006-009-R	20.1	16:10	469.3x306.9	433.3 x 270.9	2521, 2701, 3200
E763773	SCN-IT-FLT21.5-002-020-R	21.5	16:9	525x316.1	482.6 x 274.1	2521, 2701, 3200
E707935	SCN-IT-FLT22.0-005-024-R	22	16:10	504.2x326.5	470.8 x 293.1	2521, 2701, 3200
E829058	SCN-IT-FLT22.0-00X-02Y-T	22	16:10	504.16x326.5	470.8 x 293.1	2521, 2701, 3200
E182907	SCN-IT-FLT22.0-00X-00Y-T	22	16:10	498x326.5	470.8 x 293.1	2521, 2701, 3200
E201107	SCN-IT-FLT24.0-002-024-R	24	16:10	546.1x352.30	519.18 x 325.12	2521, 2701, 3200
E533175	SCN-IT-FLT26.0-003-006-R	26	16:10	582.1x380.8	550.1x343.8	2521, 2701, 3200
E793211	SCN-IT-FLT30.0-002-014-R	30	16:10	676x436	641 x 401	2521, 2701, 3200
E905980	SCN-IT-FLW32.0-001-028-R	32	16:9	732.4x428.9	698.4 x 392.9	2521, 2701, 3200
E728886	SCN-IT-FLT42.0-W01-J06-W-R	42	16:9	977.5x574.1	931.7 x 525.3	2521, 2701, 3200
E082698	SCN-IT-FLT46.0-002-028-R	46	16:9	1083x627	1018.2 x 572.8	2521, 2701, 3200
E053439	SCN-IT-SFP08.4-001-004-R	8.4	4:3	197x154	173 x 130	2521, 2701, 3200
E801537	SCN-IT-SFP10.2-001-003-R	10.2	16:10	248.4x162.2	223 x 134.2	2521, 2701, 3200
E130163	SCN-IT-SFP12.1-D92-J03-R	12.1	4:3	271.0x210.0	246 x 184.5	2521, 2701, 3200
E601840	SCN-IT-SPF15.0-D97-J00-R	15	4:3	334x262	305 x 229	2521, 2701, 3200
E864628	SCN-IT-SFP15.0-D97-J03-R	15	4:3	334x262	305 x 229	2521, 2701, 3200
E055887	SCN-IT-SFP17.0-001-004-R	17	5:4	364x298	337.8x270	2521, 2701, 3200
E212062	SCN-IT-SFP17.0-B96-J03-R	17	5:4	371x304.5	340x272.5	2521, 2701, 3200
E800153	SCN-IT-SFP19.0-001-004-R	19	5:4	410.2x338.3	376.7 x 301.2	2521, 2701, 3200
E214009	SCN-IT-SFP19.0-B94-J03-R	19	5:4	410.2x338.3	376.7 x 301.2	2521, 2701, 3200
E222460	SCN-IT-FLT32.0-D0X-020-R	32	16:9	755.5x445.4	703.7 x 399.4	2521, 2701, 3200

Part #	Model #	Diagonal Size (in)	Aspect Ratio	Outer Dimensions (mm)	Active Area (mm)	Controller
E350331	SCN-IT-FZW15.0-003-020-R	15	4:3	358.6x273.06	305.11 x 229.09	2521, 2701, 3200
E436229	SCN-IT-FZW15.0-003-020-R	15	4:3	358.6x273.06	305.11 x 229.09	2521, 2701, 3200
E586781	SCN-IT-FZW15.6-006-020-R	15.6	16:9	390.23x240.54	344.2 x 193.5	2521, 2701, 3200
E928858	SCN-IT-FZT17.0-002-02X-R	17	5:4	391.9x327.2	339.3 x 271.8	2521, 2701, 3200
E972692	SCN-IT-FZT17.0-002-02X-R	17	5:4	391.9x327.2	339.3 x 271.8	2521, 2701, 3200
E804398	SCN-IT-FZW18.5-006-020-R	18.5	16:9	449.47x274.6	409.8 x 230.4	2521, 2701, 3200
E708165	SCN-IT-FZW21.5-012-020-R	21.5	16:9	522.21x313.7	476.51 x 268	2521, 2701, 3200
E491545	SCN-IT-FZW23.0-014-020-R	23	16:9	549.2x336.5	512 x 289	2521, 2701, 3200
E411342	SCN-IT-FZW-23.6-001-020-R	23.6	16:9	569x347	523.22 x 295.22	2521, 2701, 3200
E530778	SCN-IT-FZW27.0-003-020-R	27	16:9	651.9x392.3	601.9 x 340.3	2521, 2701, 3200
E250885	SCN-IT-FZW32.0-003-020-R	32	16:9	756.4x450.9	700.4 x 394.9	2521, 2701, 3200

Notes:
1. SCN-IT-FL* - bezel designs
2. SCN-IT-FZ* - zero bezel or seamless designs
3. SCN-IT-SFP* - single touch only

3. Detail Specifications

3.1 Mechanical Specifications

Parameter	Specifications
Construction	Glass
Cover Glass	AG, CS on Glass Surface
Hardness – Cover Glass	>6 Mohs
Overall Thickness	2.8-10mm
Input methods	Finger, gloved hand or passive stylus

3.2 Optical Characteristics

Parameter	Specifications
Light Transmittance	≥90%
Haze	<1%

3.3 Reliability Testing

Parameter	Specifications
Impact resistance	IK05 Impact, No Breakage
Cable Pull Test	Cable is pulled at 90° at a rate of 50mm/min with a target LSL of 0.5 kg/cm

3.4 Environmental Specifications

Parameter	Specifications
Operating Temp Range	Operating Temp -20 to 70C (Non Condensing)
Storage Temp Range/Shipping Temp Range	Storage Temp -40 to 85C (Non Condensing)
Chemical Resistance	Unaffected by cleaning solutions including bleach and ammonia
Temp Humidity	60C at 80% RH for 240 hours
Temp Cycling	-30 to 70C 1hr 50 cycles
High Temp Storage	85C for 240 hours
Low Temp Storage	-40C for 240 hours

5.0 Warranty

5 year limited warranty on IntelliTouch
3 year limited warranty on IntelliTouch Zero-Bezel

Elo Touch Solutions, Inc. reserves the right to change or update, without notice, any information contained herein; to change, without notice, the design, construction, materials, processing or specifications of any products; and to discontinue or limit production or distribution of any products.

6.0   Troubleshooting

Troubleshooting the touchscreen

The first suggested course of action is to reconnect the touchscreen. Problems with functionality are often caused by poor attachment of the cables. Ensure that the pins of the screen align with the contacts in the connector. The gold side of the cable should face down when inserted into the connector.

If the screen is still not responding, try replacing the screen with another. Substitution is the fastest way to determine the source of the problem. If screen substitution does not resolve the issue, please continue by troubleshooting the controller.

Troubleshooting the controller

The first step in troubleshooting the controller is verifying that it is powered properly. Most Elo controllers operate on a 5 V-dc power source. Please double check the specific requirements for the controller you are using to ensure you are within the specified range.

The second step is to verify proper controller grounding, which is essential for controller functionality. Grounding allows the controller to deal with electrical noise and other environmental issues. Elo controllers are designed with Plated Through Holes (PTH) for Earth grounding of the system. Ensure that one or more of the PTH is used, and that the PTH is connected to Earth to prevent undesired controller operation. In systems where direct mounting to an Earth chassis is not possible, Elo recommends the implementation of a grounding strap to connect one PTH to Earth.

Substitution can also be used to verify a failure with the controller. Please contact Elo Technical Support for additional help with Elo controllers.

Troubleshooting the driver

Elo driver software provides a consistent software interface among Elo touchscreens and controllers. Elo systems are HID-compliant with most operating systems and should be

functional without a driver. If the screen and controller are determined to be functional on one operating system and do not function on another, a driver may be required. The driver software helps the touchscreen controller report touch location as a function of the screen coordinates. The driver also performs other operations as directed by the application.

Install the driver for the operating system to be used from the support page at www.elotouch.com. A video alignment program runs automatically at the end of the installation process. The alignment program may be run at any time from the Control Panel or a Desktop shortcut. The standard calibration program requires the touch and release of three "targets." A test screen shows confirmation of correct alignment. More precise alignment routines may be available upon request.

Connectivity to a touch device can be verified using the Device Manager in Windows operating systems. The touch device should show up under "Mice and other pointing devices." After auto-detection, with no driver installed, it should report as a HID-compliant mouse.   After successful driver installation it should report as a specific Elo Touch Solutions device.

Hardware functionality can be verified by touching the screen after auto-detection; even without any driver installed, there should be response to touch by virtue of the touch system being a HID-compliant device. Touch response may be radically misaligned with the video, but any sort of cursor movement on touch confirms basic hardware functionality.

There is very little troubleshooting to be done for the driver itself, other than verifying that the correct driver has been installed.   If several incorrect drivers have been installed, it may be necessary to do a manual uninstall to "clean up" the operating system. In such a case, see the Manual Driver Removal instructions in the Support section of www.elotouch.com.

7.0   Frequently Asked Questions

This section covers the most common questions concerning IntelliTouch components.

1. *What type of glass is used?*
Standard screens are available with soda lime glass. The nominal screen thickness of standard screens is 1.8mm.

2. *What finishes are available on Elo touchscreens?*
Elo screens can be designed with a clear or anti-glare finish.

3. *Will mounting tape or sealing materials be prepared by Elo?*
Mounting and sealing is typically completed by the customer. Elo Touch Solutions can apply mounting tape or design a sealing gasket for you upon request. See Chapter 2 for more details.

4. *How can I test functionality after integration?*
The functionality will depend on the applications and operating system used for the device. In general, a drawing program is helpful for ensuring that the system works properly after integration.

5. *Can I customize my touchscreen?*
Elo takes pride in our ability to work with customers to generate specialized touchscreen solutions for every application. For help with customizing your touchscreen, please contact your Elo Touch Solutions Representative.

6. Where can I find more information if my questions aren't answered in the Integration Guide?

Contact Elo Touch Solutions Customer Sales and Support for help with any further questions about your touchscreen application.

Check out our website

www.elotouch.com

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Getting in Touch with Us

To find out more about the extensive range of Elo touch solutions, visit our website at www.elotouch.com, or simply call the office nearest you:

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