

Interposer In-Garment Test Pass/Fail Criteria

Version 0.6

March 8, 2019

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Scope of Document

This document is intended to complement the [Interposer In-Garment Test Requirements](#) document as the centralized source for the test pass/fail criteria associated with each test item for each garment product.

Test Pass/Fail Criteria

Test Item	Passing Criterium	KML	KMY	KMS
LinearSlider Sensor Baseline and Noise (CS-1)	Noise capacitance < x	x = 0.005pF		
	x ₁ < Baseline % < x ₂	x ₁ = 75% x ₂ = 90%		
	Effective Dynamic Range Capacitance > x	x = 0.25pF		

LinearSlider Signal to Noise Ratio (CS-2)				
LinearSlider Sensitivity (CS-3)				
ProximitySensor Sensitivity (CS-4)				
LinearSlider Sensor Response Uniformity (CS-5)	Max Touch Capacitance > x	$x = 0.2\text{pF}$		
	$x_1 < \text{Touch Saturation} < x_2$	$x_1 = 0.70$ $x_2 = 0.90$		
	Centroid monotonically moves between x_1 and x_2	$x_1 = 1$ $x_2 = 10$		
LinearSlider Non-Touch Side Attenuation Verification (CS-6)				
Haptics Parametric Verification (HP-1)	<i>Need data collection first</i>			

Haptics Functional Verification (HF-1)	Does it vibrate?	Yes	Yes	Yes
LED Parametrics Verification (LP-1)				
LED Functional Verification (LF-1)	Does it look white?	N/A	Yes	N/A

Version Control

Version	Date	Author	Remarks
0.6	March 8, 2018	wtony@	Updated parameters for KL DVT build
0.5	October 15, 2018	wtony@	First draft, pending review