


i-series21.5_AndroidAIO_SW602522_v0.5

Tuning : Wesley Huang
Tested Unit Level: Android AIO
Controller : Atmel 2952 TM
Configuration Checksum: 0x5168F0
Information Block Checksum: 0x338B4A

March 28, 2019
By: Ming Hong



DUT information

 C:\WINDOWS\system32\cmd.exe

```

Downloading configuration file off UUT...
Extracting T38 information...
A subdirectory or file Log already exists.
Deleting temporary files and creating logs...

```

Results:

MXTU Tool version: 3.53 - 2016-09-13

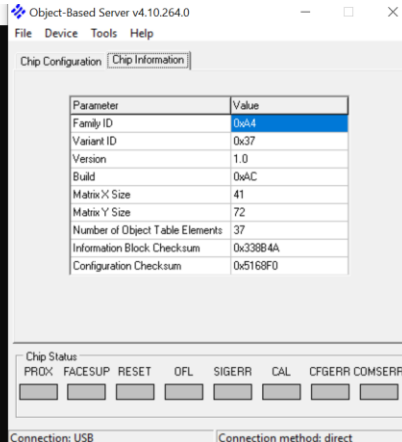
```
---Controller Chip HW and FW Info---
```

```
Family ID: 0xA4
Variant ID: 0x37
Firmware: Version 1.0 Build 0xAC
PID: 0x8A6E
Info Block Checksum: 0x338B4A
```

---Controller Chip Configuration

```
Configuration Checksum: 0x5168F0
```

```
T38 Format: 0
T38 Config File: SW602522 v0.5
T38 CTR Part Number and Rev: 00000000 Rev 0
T38 CTR Serial Number: 0000000000
T38 Screen Size: 15.6 INCHES
T38 Customer ID: 0ELO
T38 System Serial Number: 0000
T38 Screen Serial Number: 0000000000
```



10x10 Tap Test

Max Accuracy : 1.64 (mm)

Max X Jitter: 0 (mm)

Max Y Jitter: 0 (mm)

Detected Ratio: 100%

Drag Test

Pass Elo's Spec

CS Test

Pass 3v

Report Rate

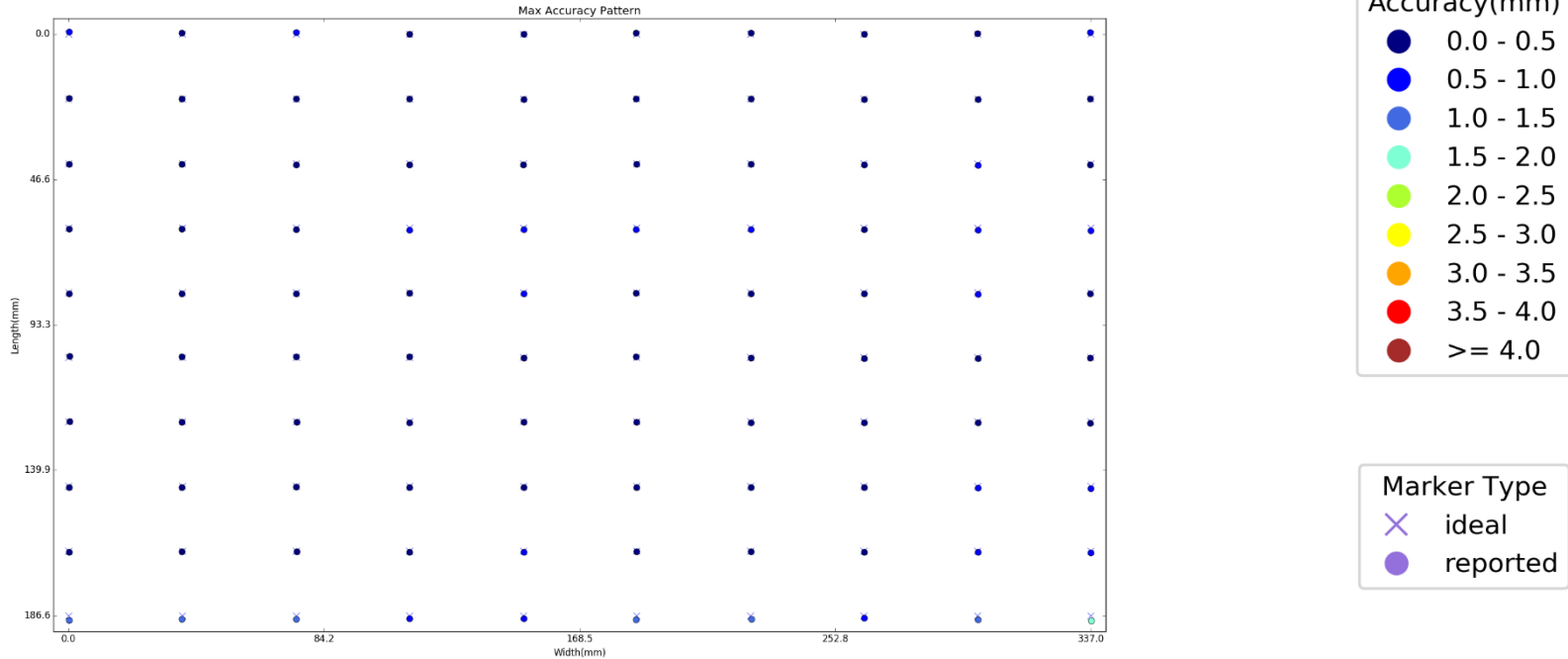
133 Hz with single touch

Manual Test with Appendix gloves

Refer to slide Page 15-17

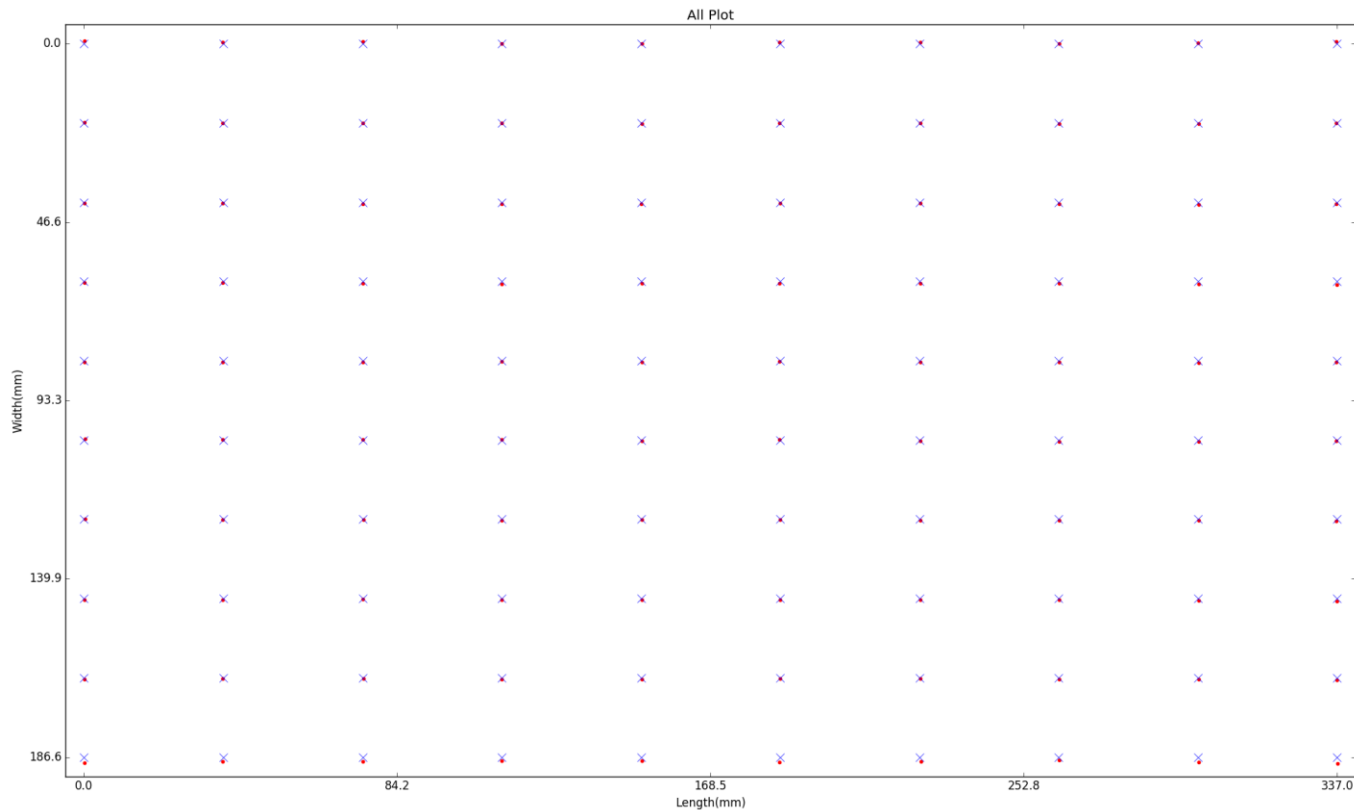
Performance Overview

Tap 10x10 Touch Accuracy

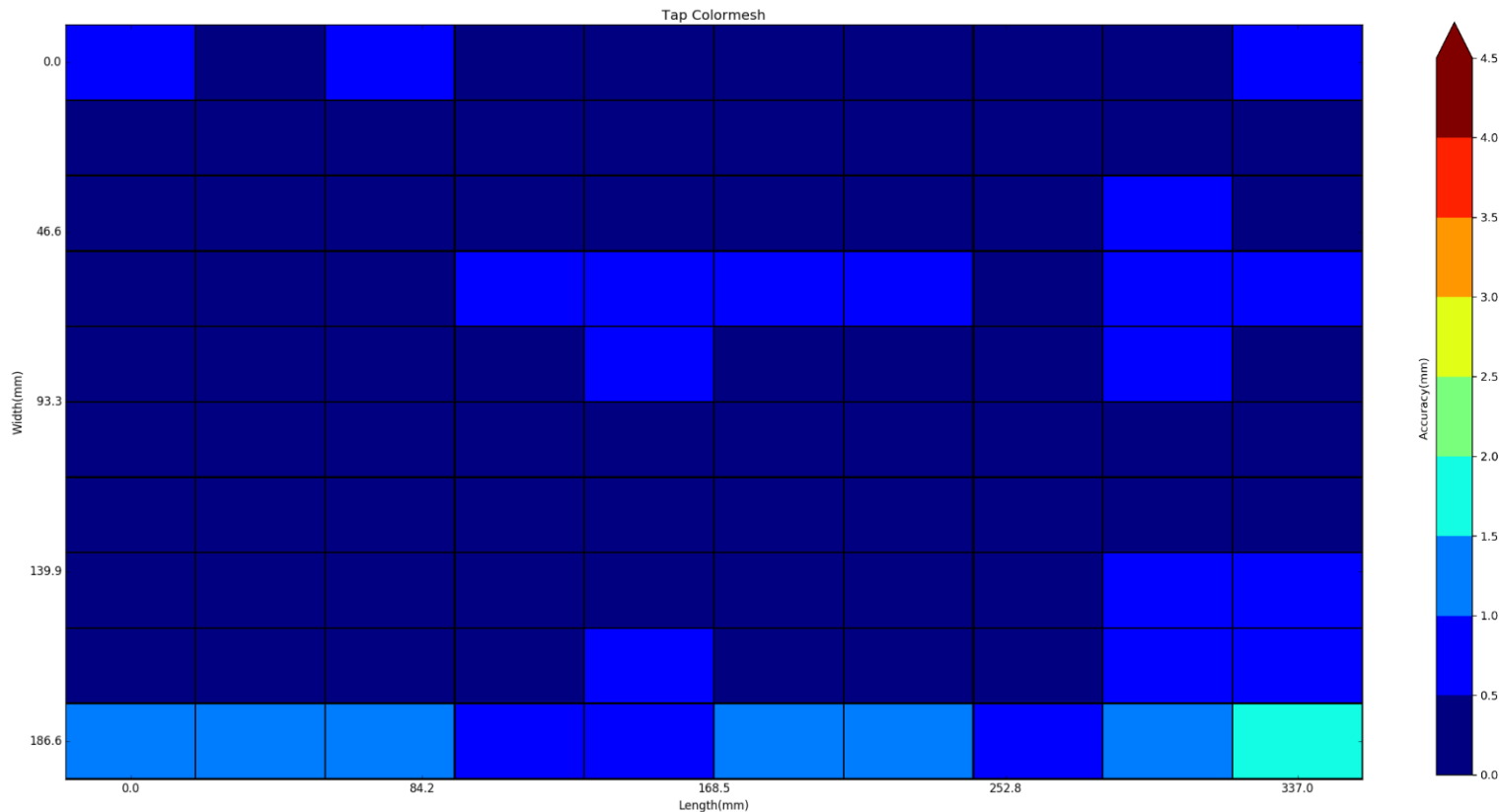


Detection Ratio Average (%)	Mean Touch Accuracy (mm)	Max Touch Accuracy (mm)	Max Jitter X (mm)	Max Jitter Y (mm)
100	0.46	1.64	0	0

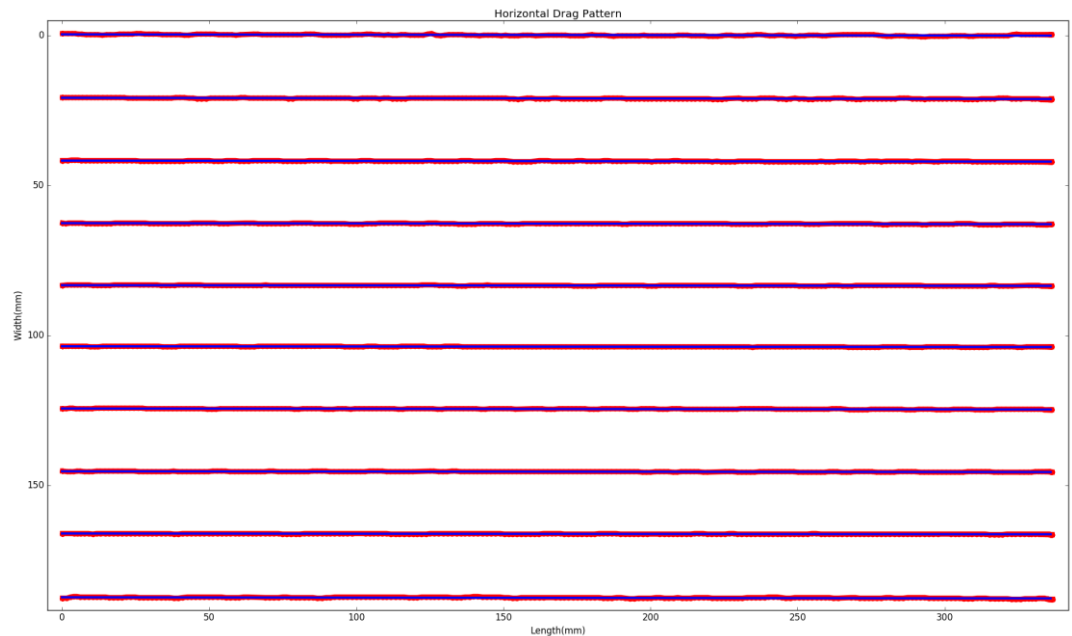
Tap 10x10 Touch Plot



Tap 10x10 Color Mesh



Horizontal Drag speed at 200 mm/s



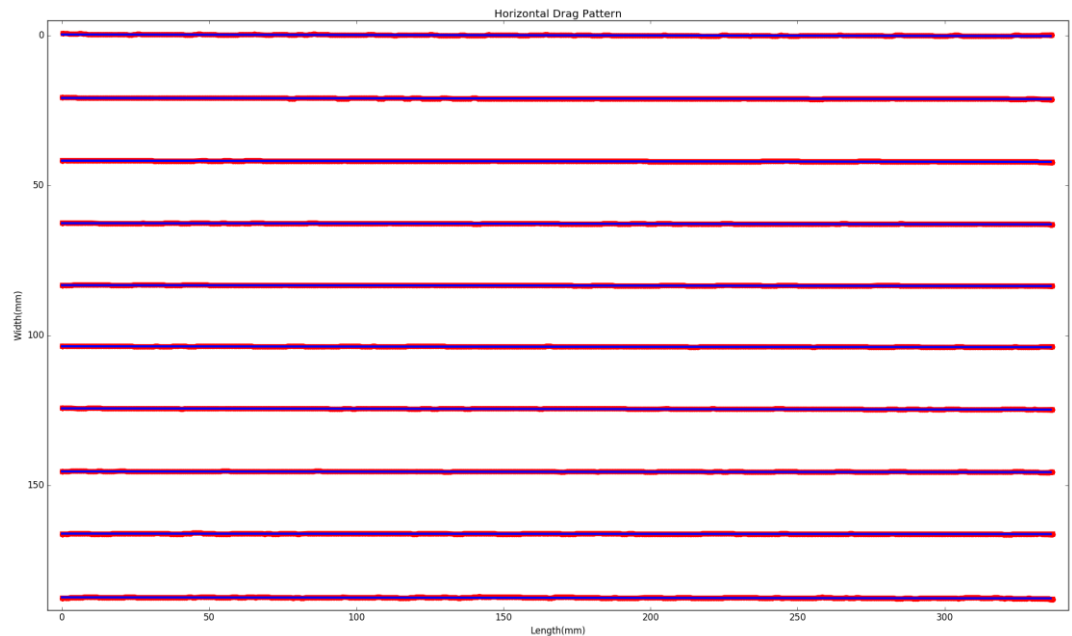
Marker Type

× ideal

• reported

Max Linearity (mm)	Mean Linearity (mm)	If break line
0.49	0.09	No

Horizontal Drag speed at 100 mm/s



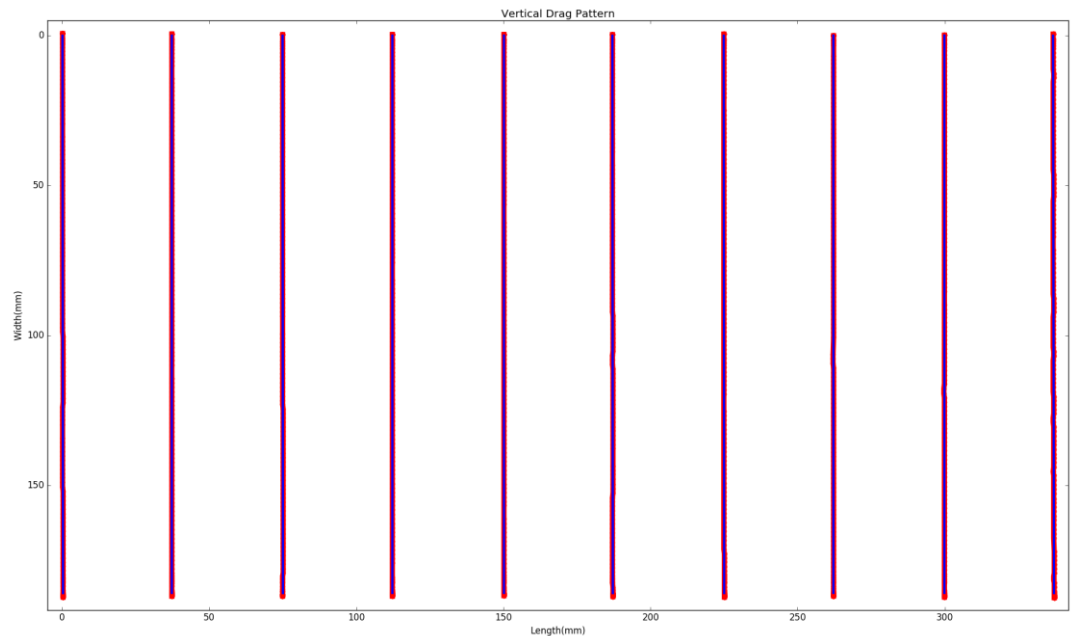
Marker Type

x ideal

. reported

Max Linearity (mm)	Mean Linearity (mm)	If break line
0.41	0.07	No

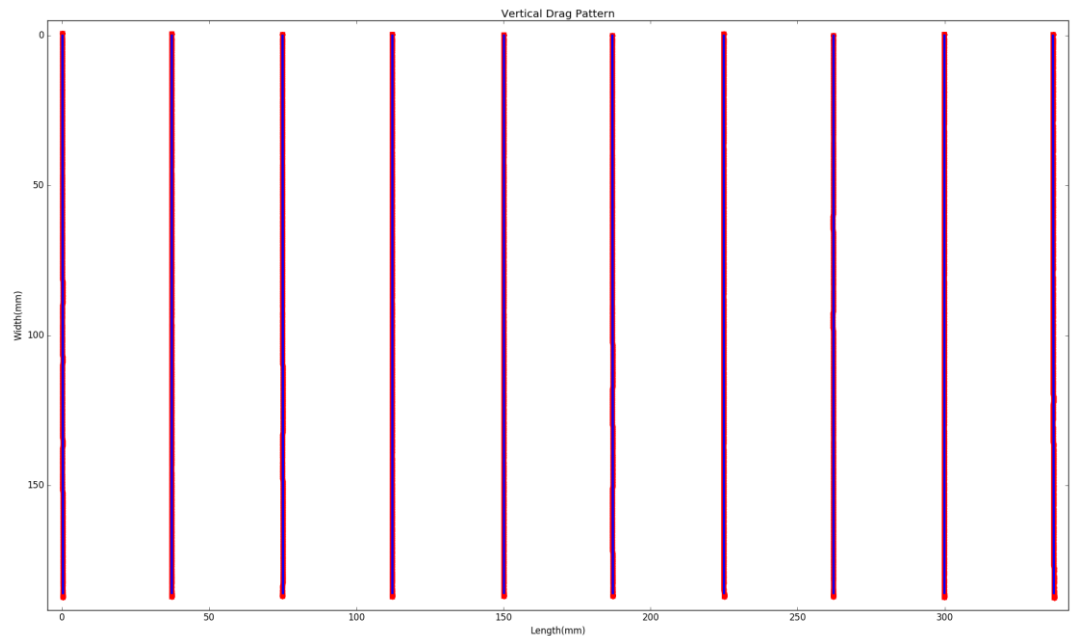
Vertical Drag speed at 200 mm/s



Marker Type
 × ideal
 • reported

Max Linearity (mm)	Mean Linearity (mm)	If break line
0.2	0.03	No

Vertical Drag speed at 100 mm/s



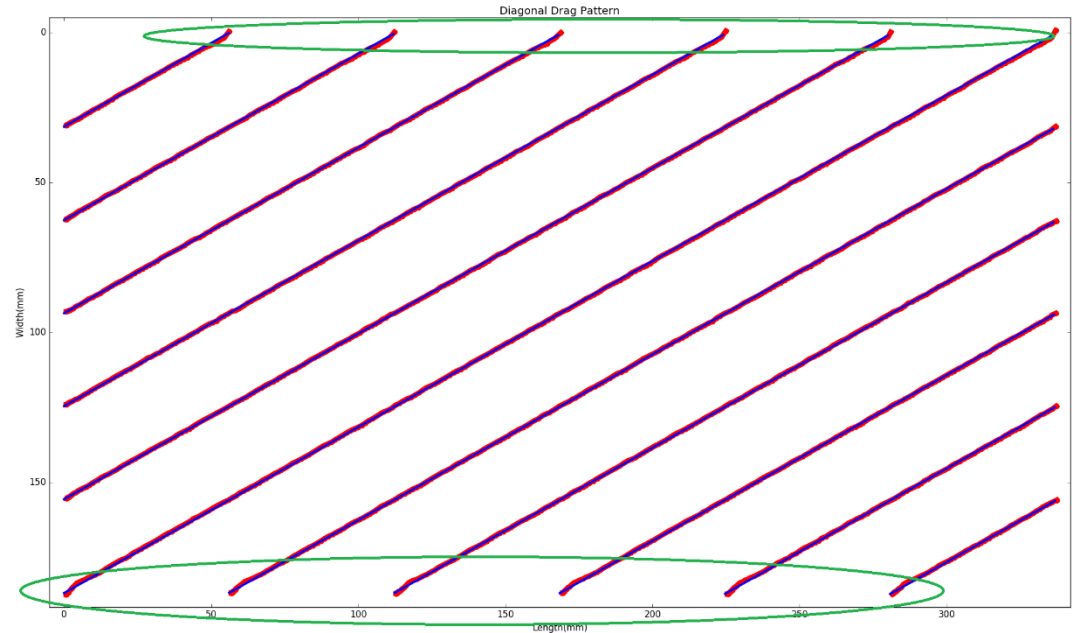
Marker Type

× ideal

• reported

Max Linearity (mm)	Mean Linearity (mm)	If break line
0.17	0.03	No

Diagonal Drag speed at 200 mm/s



Marker Type

×

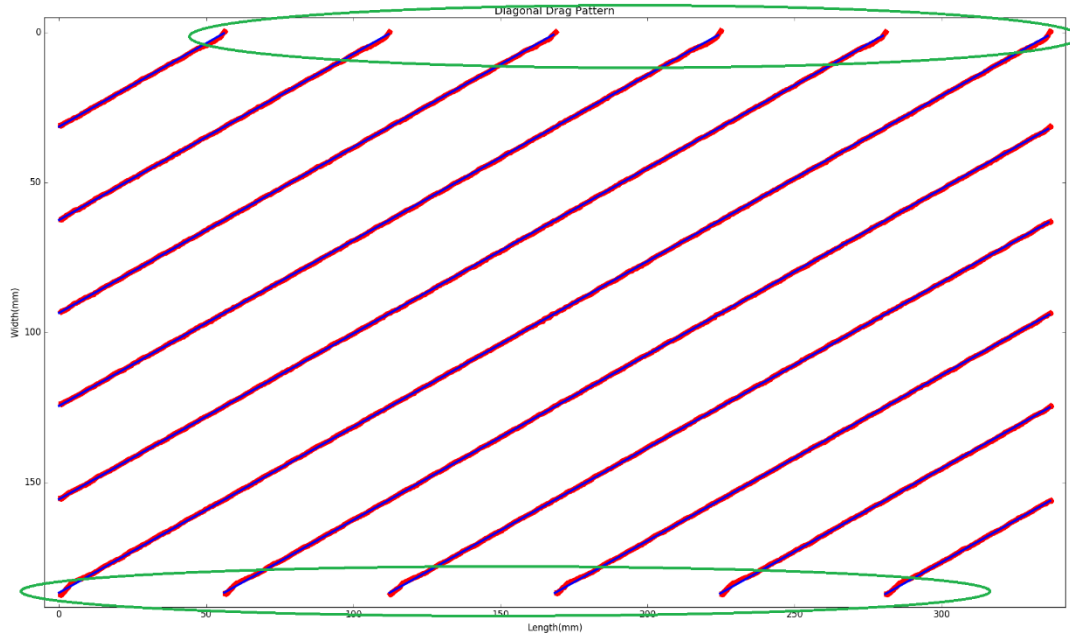
 ideal

●

 reported

Max Linearity (mm)	Mean Linearity (mm)	If break line
0.92	0.17	No

Diagonal Drag speed at 100 mm/s



Marker Type

× ideal

● reported

Max Linearity (mm)	Mean Linearity (mm)	If break line
0.9	0.14	No

CS Test Result



Test Settings		Result
Test Level	3V	Pass
Start Frequency	0.15 MHz	
Stop Frequency	80 MHz	
Dwell Time	3 second	

1. Other settings unmentioned above are all followed by IEC 61000-4-6: Immunity to Conducted Disturbances
2. Test is proceeding with continuous one touch dragging throughout all test. Only unsmoothed lines appeared sometimes.
3. Touch performance functions normally when exposing to the same frequency again and after this test.

Report Rate



Amount of Touch	Report Rate (Hz)
1	133
5	129
10	116

Manual Test Result

5.1	Edge :	Result
5.1.1	Drag along edge	GOOD
5.1.2	Drag towards the edge	GOOD
5.1.3	Drag from outside of the edge	GOOD
5.1.4	Check zinger while tapping near edge	Acceptable
5.2	Tap :	Result
5.2.1	Grid test (only 1 up & 1 down)	GOOD
5.2.2	Right click active	GOOD
5.2.3	Verify no ghost touch	GOOD
5.2.4	Quick Tap (Tap slightly with single tap)	GOOD
5.3	Drag :	Result
5.3.1	Drag with max touches	GOOD
5.3.2	Draw sharp angle	Acceptable
5.3.3	Drag with fast speed (>250mm/s)	GOOD

5.4	Palm :		Result
5.4.1	No false touch from palm	A:Fist on screen	GOOD
		B:press touchscreen from the border	Acceptable
		C:Palm on screen for 1 min	GOOD
		D:Drag and tap while Wrist on screen	GOOD
5.4.2	Power on/off with palm on screen		GOOD
5.5	Multi-Touch :		Result
5.5.1	Verify multi-touch supported (touches: 10)		GOOD
5.5.2	Minimum touch separation supported(pitches: 4.9)		15 mm
5.6	Power ON/OFF :		Result
5.6.1	Power on/off & Hot plug		GOOD
5.6.2	Wake on touch		GOOD
5.7	Water :		Result
5.7.1	No false touch with spray tap water <3mm		GOOD
5.7.2	No false touch with tap water pool (10 ml)		GOOD
5.7.3	Water pool stay on screen for 1 minute		GOOD

Appendix :

Information of the gloves and the max touches supported



touches supported : 5

Appendix :

Information of the gloves and the max touches supported



touches supported : 2