HMI Framework Test Case

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Result

V

V

V

Result

V

V

V

Result

V

V

V

NG1

NG2

NG3

NG4

Result

V

V

V

V

V

V

V

V

Result

V

V

sub window

Media player

(none)

HVAC

HVAC

(none)

(none)

(none)

Expected next

screen

On screen

Home screen

Off, Off, NA,

MP, MP, NA,

Off, Off, NA,

Off, Off, NA,

Radio, NA,

Off, Off, NA,

Expected

RR

NA

NA

RR

NA

NA

Off, Off, NA,

MP, MP, NA,

Ring, Ring,

Ring, Ring,

Ring, Ring,

Tel, Tel, NA,

MP, MP, NA,

NA, NA

NA, NA

NA, NA

NA

NA

V

V

Result

screen

Media

player

Media

player

Media

player

Home

screen

Phone

Radio,

Radio, NA,

FL, FR, RL,

Off, Off, NA,

NA

NA

NA

NA

NA

NA

Radio,

This document shows what kinds of test was done for the following modules. • Home screen

- Window manager
- Sound manager

For these tests, sample applications which are contained in home screen's source tree are used as test program. These samples based on CES2017, and changed for new

System testing

home screen, window manager and sound manager. Screen transition

Start Window manager and Sound manager, Show the

Home screen

Pre condition: 1. Power off. 2. All HMI framwork related software must be installed properly.

Test cases:

Power off

Current screen Operation **Expected result**

Turn on the board

Turn on the board

Power off

1

3	Power off	Turn on the board	Home screen will appear	V
*) TI	nese tests will be tes	ted at same time.		
,	he Home screen co lication icons.	nsist status bar, four s	hortcut icons, control bar and nir	ne

Window manager will start

Sound manager will start

Current screen Operation **Expected next screen** Result V 1 Home screen Touch Media player icon Media player

Touch Radio icon 2 Home screen Radio 3 Touch Navi icon Simple EGL Home screen

1. After boot-up, and the Home screen is shown.

4 Home screen

Test cases:

4	Home screen	Touch HVAC icon	HVAC	V
,	egarding #3, Navi io of native weston ap	con is reused for anothe	r application. Simp	le EGL is used for
	vitch the appli	ication by shorto	cut button	

advance. Test cases:

Expected next

screen

2. Since this test is for "Swiching", so each application must be launched in

Touch Media player 1 Home screen Media player shortcut

shortcut

Operation

Current

screen

- 2 Touch HVAC shortcut **HVAC** Home screen 3
- Simple EGL Home screen Touch Navi shortcut Touch Media player Media player

4 Media player

5	Media player	Touch HVAC s	hortcut H\	VAC	V
6	Media player	Touch Navi sho	ortcut Si	mple EGL	V
7	Media player	Touch Home s shortcut	creen Ho	ome screen	V
8	Radio	Touch Media p shortcut	layer Mo	edia player	V
9	Radio	Touch HVAC s	hortcut H\	VAC	V
10	Radio	Touch Navi sh	ortcut Si	mple EGL	V
11	Radio	Touch Home screen shortcut Home screen		V	
12	Simple EGL	Touch Media p shortcut	layer Mo	edia player	V
13	Simple EGL	Touch HVAC s	hortcut H\	VAC	V
14	Simple EGL	Touch Navi sh	ortcut Si	mple EGL	V
15	Simple EGL	Touch Home s shortcut	creen Ho	ome screen	V
16	HVAC	Touch Media p shortcut	layer Mo	edia player	V
17	HVAC	Touch HVAC s	hortcut H\	VAC	V
18	HVAC	Touch Navi sh	ortcut Si	mple EGL	V
19	HVAC	Touch Home s shortcut	creen Ho	ome screen	V
Sprit window Pre condition: 1. Replace layer.json file from official release to sprit test version. 2. After boot-up, and the Home screen is shown.					
Test cases:					
	Current	Omeration	Expected next	Expected next	Decult

main window

screen)

Simple EGL

Simple EGL

Simple EGL

screen)

screen)

Simple EGL (full

Simple EGL (full

Home screen

(full screen)

Simple EGL (full

After #1.2 1.3 1.4 After #1.3

screen

Home

screen

After #1.1

Operation

Touch Navi icon

Touch HVAC

Touch Media

Touch HVAC

player shortcut

Touch Navi icon

screen shortcut

Touch Navi icon

1. After boot-up, and the Home screen is shown.

Operation

testing tool

testing tool

Off, Off,

NA, NA

After #1.1

After #1.2

Off, Off,

NA, NA

After #2.1

After #2.2

Current

FL, FR,

RL, RR

Off, Off,

NA, NA

NA, NA

After #2.1

Note: We will test for Radio in few days.

Home

screen

After

#1.1

After

#1.2

Home

screen

After

#2.1

After

#2.2

1.1

1.2

1.3

2.1

2.2

2.3

#

1.1

2.1

2.2

Issue on-command of

Issue off-command of

2. Internal testing tool is available.

Touch Home

shortcut

shortcut

#

1.1

1.2

2.1

2.2

1.5 After #1.4

After **#1.2**

After #2.1

NG report: NG1: When HVAC shortcut was pushed, sub window disappeared and HVAC screen never appear. NG2: When Navi shortcut was pushed, Simple EGL application is hunged. (seems something event doesn't reached) NG3: When Home screen shortcut was pushed, Home screen appeared but previous application still appear with half transparency. NG4: When Navi shortcut was pushed, Simple EGL application is hunged. (seems
Something event doesn't reached) On-screen
Pre condition:

1.2 After #1.1

Test cases:

#

1.1

Current

screen

Home screen

#	Current screen	Current FL, FR, RL, RR	Operation	Expected next screen	Expected FL, FR, RL, RR	Result	
Test cases:							
1. After boot-up, and the Home screen is shown.							
Transition between audio-off and basic sound Pre condition:							
Sound transition							

Touch Media

player icon

Touch Play

Touch Stop

Touch Radio

Touch Play

Touch Stop

Operation

Touch Media

player icon

icon

Touch Play

button

Transition between basic sound and another basic sound

button

button

icon

button

button

Media

player

Media

player

Media

player

Radio

Radio

Radio

Expected

next

screen

Media

player

Radio

Radio

Pre condition: 1. After boot-up, and the Home screen is shown. **Test cases:**

Current

screen

Home

screen

screen

After

#2.1

After Touch Play Media MP, MP, NA, V 1.2 After #1.1 #1.1 button NA player After Touch Radio MP, MP, NA, V 1.3 After #1.2 Radio #1.2 shortcut NA Radio, After Touch Play 1.4 After #1.3 Radio Radio, NA, V #1.3 button NA Home Off, Off, Touch Radio Off, Off, NA,

					INA			
2.3	After #2.2	After #2.2	Touch Media player shortcut	Media player	Radio, Radio, NA, NA	V		
2.4	After #2.3	After #2.3	Touch Play button	Media player	MP, MP, NA, NA	V		
Note:	Note: We will test for Radio in few days.							
Trar	Transition between basic sound and interrupt sound							
Pre condition:								
 After boot-up, and the Home screen is shown. Paring with mobile phone has been completed. Laucn phone application in advance 								
Test cases:								
#	Current screen	Current FL, FR,	Operation	Expected next	Expected FL, FR, RL,	Result		

Touch Media

player icon

Touch Play

button

Call from

external

Touch Home

Touch Phone

Note: Since Setting application wasn't ported to new window manager, so it's

phone

screen

icon

shortcut

Touch Off-After 1.6 After #1.5 Phone hook button #1.5 Touch On-After 1.7 After #1.6 Phone #1.6 hook button

impossible to make the pre-condition. This test was skipped.

RL, RR

Off, Off,

NA, NA

After #1.1

After #1.2

After #1.3

After #1.4

Home

screen

After

#1.1

After

#1.2

After

#1.3

After

#1.4

1.1

1.2

1.3

1.4

1.5

1. After boot-up, and the Home screen is shown. 2. Any Bluetooth device have not pared yet. At that time, The connected status icon of bluetooth is toned down.

Pre condition:

Status bar

Bluetooth icon

Test cases: Current

1.1

Operation **Expected next screen** screen Touch Settings Home Settings screen icon

Touch Bluetooth

*) Since Settings application wasn't ported to new Window manager for testing so to/from Settings transition wasn't tested. In other word, bacause it is impossible to do the paring operation of bluetooth, the connected status icon of bluetooth wasn't tested.

Launch the application by app icon on the Home screen Pre condition:

^{1.} After boot-up, and the Home screen is shown.

^{1.2} Bluetooth sub menu After #1.1 sub menu Touch target test Some blue connected icon 1.3 After #1.2 device appear on Bluetooth status icon