Adding a new Assembly and Test location for products assembled in SSOP10 package

WHAT is the change?

Progressing on activities related to process modernization and capacity improvement, ST is pleased to announce the introduction of TSHT/China as an added subcontractor for Assy and Test & Finishing activities for some products assembled in our SSOP10 package, actually also assembled and tested in ST-Casablanca-Bouskoura Plant. The list of products being validated in TSHT is listed here below:

Commercial Product	Current Finished Good	Current Assy & TnF Plant	Added Assy & TnF Plant
VIPER06HS	VIPER06HS-2/ and VIPER06HSTR-2/	Bouskoura	TSHT
VIPER06LS	VIPER06LS-2/ and VIPER06LSTR-2/	Bouskoura	TSHT
VIPER06XS	VIPER06XS-2/ and VIPER06XSTR-2/	Bouskoura	TSHT
HVLED001A	HVLED001A/ and HVLED001ATR/	Bouskoura	TSHT

Both “Tape & Reel” and “Tube” packing are validated in TSHT. Dedicated engineering trials and test vehicles have been defined to validate the change.

WHY:

The purpose of the introduction of TSHT for both Assy and Test & Finishing activities for the here above listed commercial products is to further improve the rationalization of our manufacturing assets and provide a better support to our customers by enhancing the manufacturing process for higher volume production.

WHEN will this change occur?

The following table lists all relevant information

Commercial Product	Added F.G.	Test Vehicles Samples Availability	Final Validation Report Availability	Estimated First Shipment Date (*)
VIPER06HS	VIPER06HS$9A1 and VIPER06HSTR$9A1	Upon request	Dec 2017	Feb 2018
VIPER06LS	VIPER06LS$9A1 and VIPER06LSTR$9A1	Upon request	Dec 2017	Feb 2018
VIPER06XS	VIPER06XS$9A1 and VIPER06XSTR$9A1	Upon request	Dec 2017	Feb 2018
HVLED001A	HVLED001A$9A1 and HVLED001ATR$9A1	Upon request	Dec 2017	Feb 2018

(*) Earlier shipments may be negotiated

HOW will the change be qualified?

- The qualification is based on Test vehicle representatives by using internal ST rule for changes.

IMPACTS OF THE CHANGE:

Form: No change
Fit: No change
Function: No change

Addenda: Intermediate Reliability validation status

MT24 Test plan and results summary

Die Oriented Tests							
Test	**Method**	**Conditions**	**Failure/SS**			**Duration**	**Note**
			Lot 1	**Lot 2**	**Lot 3**		
HTRB	High Temperature Reverse Bias						
		Tj=150 °C; **VH = 800V , Vcc=23V**	**0/77** **0/77** **R**	**-**	**-**	**168h** **500h** **1000h**	
ELFR	Early Life Failure Rate						
		Tj=150 °C; **VH = 800V , Vcc=23V**	**R**	**R**	**-**	**48h**	

Package Oriented Tests							
Test	**Method**	**Conditions**	**Failure/SS**			**Duration**	**Note**
			Lot 1	**Lot 2**	**Lot 3**		
PC	Pre-Conditioning: Moisture sensitivity level 3						
		192h 30°C/60% - 3 reflow PBT 260°C	**0/75**	**0/75**	**0/75**		
THB	Temperature Humidity Bias						
	PC before	**Ta=85°C/85%RH**	**0/25** **R**	**0/25** **R**	**0/25** **R**	**168h** **500h** **1000h**	
AC	Autoclave						
	PC before	**121°C 2atm**	**0/25**	**0/25**	**0/25**	**96h**	
TC	Temperature Cycling						
	PC before	**Temp. range: -65/+150°C**	**0/25** **R**	**0/25** **R**	**0/25** **R**	**200cy** **500cy**	
HTSL	High Temperature Storage						
	No bias	**Tamb=150°C**	**0/25** **R**	**0/25** **R**	**0/25** **R**	**500h** **1000h**	

Electrical Characterization Tests							
Test	**Method**	**Conditions**	**Failure/SS**			**Duration**	**Note**
			Lot 1	**Lot 2**	**Lot 3**		
ESD	Electro Static Discharge						
	Charge Device Model	**+/- 1500V**	**0/3**	**-**	**-**		

R = Test running – results non yet available

U1M3 Test plan and results summary

Die Oriented Tests							
Test	**Method**	**Conditions**	**Failure/SS**			**Duration**	**Note**
			Lot 1	**Lot 2**	**Lot 3**		
HTOL	High Temperature Operating Life						
	PC before	**Vcc=18V, VH=480V Tj=150°C**	**R**			**168h 500h 1000h**	
ELFR	Early Life Failure Rate						
		Vcc=18V, VH=480V Tj=150°C	**R**			**48h**	

Package Oriented Tests							
Test	**Method**	**Conditions**	**Failure/SS**			**Duration**	**Note**
			Lot 1	**Lot 2**	**Lot 3**		
PC	Pre-Conditioning: Moisture sensitivity level 3						
		192h 30°C/60% - 3 reflow PBT 260°C	**0/75**				
THB	Temperature Humidity Bias						
	PC before	**Ta=85°C/85%RH**	**R**			**168h 500h 1000h**	
AC	Autoclave						
	PC before	**121°C 2atm**	**R**			**96h**	
TC	Temperature Cycling						
	PC before	**Temp. range: -65/+150°C**	**R**			**200cy 500cy**	
HTSL	High Temperature Storage						
	No bias	**Tamb=150°C**	**R**			**500h 1000h**	

Electrical Characterization Tests							
Test	**Method**	**Conditions**	**Failure/SS**			**Duration**	**Note**
			Lot 1	**Lot 2**	**Lot 3**		
ESD	Electro Static Discharge						
	Charge Device Model	**+/- 750V**	**0/3**				

R = Test running – results non yet available