

Automotive Discrete Group (ADG)  
Power Transistor Division

## Process Change Information

### Capacity Extension for PowerFLAT™ Products in Tong Fu Microelectronics

Dear Customer,

Following the continuous improvement of our service and in order to increase productivity, we are pleased to announce that PowerFLAT™ products, currently manufactured in our ST's Shenzhen back end will be also produced in one of our qualified back end subcontractors, Tong Fu Microelectronics based in China (TFME).

The parts produced in TFME guarantee the same quality and electrical characteristics as per current production.

In the next pages, we are reporting the qualification plan to reach full maturity.

The change has been classified as **Class 1** according to ST internal rules.

The qualification of the change is currently in progress and we forecast to complete it by wk 26/2018

Sincerely Yours!

## Capacity Extension for PowerFLAT™ Products in Tong Fu Microelectronics

<b>ST Part number:</b>	ST PNs: <b>Attached in a separate file</b> Package: <b>PowerFLAT™</b>																																																		
<b>Reason and background of the change</b>	To allow flexibility and increase Capacity																																																		
<b>Detailed description of change(s), including affected type of changes</b>	Industrial PowerFLAT™ products both with Ribbon and Clip bonding solution, currently manufactured in our ST's Shenzhen back end will be also produced in one of our qualified back end subcontractors, Tong Fu Microelectronics based in China (TFME).																																																		
<b>Impact on form, fit, function, or reliability.</b>	No Impact																																																		
<b>Datasheet</b>	No Impact																																																		
<b>Benefit of the change</b>	Capacity and flexibility increase.																																																		
<b>Qualification Plan and Implementation date for change</b>	The qualification will be completed according to the following plan:																																																		
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Test Vehicles</th> <th style="text-align: center;">N. of Lots</th> <th style="text-align: left;">Reliability Plan</th> <th style="text-align: center;">Parametric Verification</th> <th style="text-align: center;">Forecast (wk)</th> </tr> </thead> <tbody> <tr> <td>STL90N6F7</td> <td style="text-align: center;">1</td> <td>Complete</td> <td style="text-align: center;">X</td> <td rowspan="6" style="text-align: center; vertical-align: middle;">Wk 26</td> </tr> <tr> <td>STL130N6F7</td> <td style="text-align: center;">1</td> <td>Complete</td> <td style="text-align: center;">X</td> </tr> <tr> <td>STL140N6F7</td> <td style="text-align: center;">1</td> <td>Complete</td> <td style="text-align: center;">X</td> </tr> <tr> <td>STL40N10F7</td> <td style="text-align: center;">1</td> <td>Complete</td> <td style="text-align: center;">X</td> </tr> <tr> <td>STL56N3LLH5</td> <td style="text-align: center;">1</td> <td>Complete</td> <td style="text-align: center;">X</td> </tr> <tr> <td>STL60P4LLF6</td> <td style="text-align: center;">1</td> <td>Complete</td> <td style="text-align: center;">X</td> </tr> </tbody> </table> <p><b><u>Reliability Plan</u></b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Stress</th> <th style="text-align: center;">PC (*)</th> <th style="text-align: center;">Steps</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><b>HTRB</b></td> <td style="text-align: center;">N</td> <td style="text-align: center;">168, 500, 1000hrs</td> </tr> <tr> <td style="text-align: center;"><b>HTGB</b></td> <td style="text-align: center;">N</td> <td style="text-align: center;">168, 500, 1000hrs</td> </tr> <tr> <td style="text-align: center;"><b>TC</b></td> <td style="text-align: center;">Y</td> <td style="text-align: center;">100, 200, 500cy</td> </tr> <tr> <td style="text-align: center;"><b>AC</b></td> <td style="text-align: center;">Y</td> <td style="text-align: center;">96H</td> </tr> <tr> <td style="text-align: center;"><b>H3TRB</b></td> <td style="text-align: center;">Y</td> <td style="text-align: center;">168, 500, 1000hrs</td> </tr> <tr> <td style="text-align: center;"><b>IOL</b></td> <td style="text-align: center;">Y</td> <td style="text-align: center;">8.6Kcy</td> </tr> </tbody> </table> <p><b>Note:</b> PC = Preconditioning</p> <p>Planned Samples Availability → wk 27/2018  Planned Implementation Date → wk 27/2018  Planned Shipment Date → wk 31/2018</p>	Test Vehicles	N. of Lots	Reliability Plan	Parametric Verification	Forecast (wk)	STL90N6F7	1	Complete	X	Wk 26	STL130N6F7	1	Complete	X	STL140N6F7	1	Complete	X	STL40N10F7	1	Complete	X	STL56N3LLH5	1	Complete	X	STL60P4LLF6	1	Complete	X	Stress	PC (*)	Steps	<b>HTRB</b>	N	168, 500, 1000hrs	<b>HTGB</b>	N	168, 500, 1000hrs	<b>TC</b>	Y	100, 200, 500cy	<b>AC</b>	Y	96H	<b>H3TRB</b>	Y	168, 500, 1000hrs	<b>IOL</b>	Y
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