Materials Declaration Form

IPC  1752  
Form Type *  Distribute  
Sectionals *  Material Info  
Subsectionals *  Manufacturing Info  
Manufacturing Info  
Company Name *  STMicroelectronics  
Response Date *  26-07-2017  
Company Unique ID  NL 008751171B01  
Contact Name *  Refer to Supplier Comment section  
Contact Phone *  Refer to Supplier Comment section  
Contact Email *  Refer to Supplier Comment section  
Authorized Representative *  MDG MD CHAMPION  
Representative Title  MDG MD CHAMPION  
Representative Phone *  Refer to Supplier Comment section  
Representative Email *  Refer to Supplier Comment section  
Supplier Comment  
Online Technical Support - STMicroelectronics :  
Uncertainty Statement  
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Legal Statement  
Supplier Acceptance *  true  
Legal Declaration *  Standard  
Legal Statement  
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Signature Not Verified  
Digitally signed by MDF Champion  
Date: 2017.07.26  
14:49:16 -02:00
<table>
<thead>
<tr>
<th>Mfr Item Number</th>
<th>Mfr Item Name</th>
<th>Version</th>
<th>Mfr Site</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>STM32F401CBU7</td>
<td>S3MI*423XXXZ</td>
<td>A</td>
<td>998Z</td>
<td>26-07-2017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amount</th>
<th>UoM</th>
<th>Unit type</th>
<th>ST ECOPACK Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>97.90</td>
<td>mg</td>
<td>Each</td>
<td>ECOPACK® 2</td>
</tr>
</tbody>
</table>

**Comment**

ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material).

### Manufacturing Information

<table>
<thead>
<tr>
<th>J-STD-020 MSL Rating</th>
<th>Classification Temp</th>
<th>Nbr of Reflow Cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>260</td>
<td>3</td>
</tr>
</tbody>
</table>

**bulk Solder Termination**

<table>
<thead>
<tr>
<th>Terminal Plating</th>
<th>Terminal Base Alloy</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin (Sn), matte</td>
<td>Copper Alloy</td>
<td></td>
</tr>
</tbody>
</table>

**Not Applicable; if coating is used or other bulk termination**

<table>
<thead>
<tr>
<th>Package Designator</th>
<th>Size</th>
<th>Nbr of instances</th>
<th>Shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>QFN</td>
<td>7X7X0.55</td>
<td>48</td>
<td>No lead</td>
</tr>
</tbody>
</table>

**Comment**

Package: A089 UFQFPN 7X7X0.55 48L 0.5 MM PITCH 8202210

<table>
<thead>
<tr>
<th>Query</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Product(s) meets EU RoHS requirement without any exemptions</td>
<td>TRUE</td>
</tr>
<tr>
<td>2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)</td>
<td>FALSE</td>
</tr>
<tr>
<td>3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)</td>
<td>FALSE</td>
</tr>
<tr>
<td>4 - Product(s) does not meet EU RoHS requirements and is not under exemptions</td>
<td>FALSE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exemption Id.</th>
<th>Description</th>
</tr>
</thead>
</table>

### QueryList : REACH-12th January 2017

<table>
<thead>
<tr>
<th>Query</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH</td>
<td>TRUE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CategoryLevel_Name</th>
<th>CategoryLevel_Threshold</th>
<th>amount in product (mg)</th>
<th>Application</th>
<th>ppm in product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homogeneous Material</td>
<td>Material Group</td>
<td>1/vas</td>
<td>UoM</td>
<td>Level</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------</td>
<td>-------</td>
<td>-----</td>
<td>-------</td>
</tr>
<tr>
<td>Die or dies</td>
<td>M-011 Other inorganic materials</td>
<td>3,563</td>
<td>mg</td>
<td>supplier</td>
</tr>
<tr>
<td>Die or dies</td>
<td>M-011 Other inorganic materials</td>
<td>0,029</td>
<td>mg</td>
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<tr>
<td>Die or dies</td>
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<tr>
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<tr>
<td>Die or dies</td>
<td>M-011 Other inorganic materials</td>
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<td>mg</td>
<td>supplier</td>
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<td>Die or dies</td>
<td>M-011 Other inorganic materials</td>
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<td>mg</td>
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<td>mg</td>
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<td>Die or dies</td>
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<td>mg</td>
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<tr>
<td>Die or dies</td>
<td>M-011 Other inorganic materials</td>
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<td>mg</td>
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<tr>
<td>Die or dies</td>
<td>M-011 Other inorganic materials</td>
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<td>mg</td>
<td>supplier</td>
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<tr>
<td>Die or dies</td>
<td>M-011 Other inorganic materials</td>
<td>0,045</td>
<td>mg</td>
<td>supplier</td>
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<tr>
<td>Die or dies</td>
<td>M-011 Other inorganic materials</td>
<td>0,045</td>
<td>mg</td>
<td>supplier</td>
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<tr>
<td>Die or dies</td>
<td>M-011 Other inorganic materials</td>
<td>0,004</td>
<td>mg</td>
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<tr>
<td>Mold Compound_EME-G770_Sumitomo</td>
<td>M-011 Other inorganic materials</td>
<td>25,850</td>
<td>mg</td>
<td>supplier</td>
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<tr>
<td>Mold Compound_EME-G770_Sumitomo</td>
<td>M-011 Other inorganic materials</td>
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<td>supplier</td>
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<tr>
<td>Mold Compound_EME-G770_Sumitomo</td>
<td>M-011 Other inorganic materials</td>
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<td>mg</td>
<td>supplier</td>
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<tr>
<td>Mold Compound_EME-G770_Sumitomo</td>
<td>M-011 Other inorganic materials</td>
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<tr>
<td>Mold Compound_EME-G770_Sumitomo</td>
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<td>supplier</td>
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<td>Mold Compound_EME-G770_Sumitomo</td>
<td>M-011 Other inorganic materials</td>
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<td>supplier</td>
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<tr>
<td>Mold Compound_EME-G770_Sumitomo</td>
<td>M-011 Other inorganic materials</td>
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<td>mg</td>
<td>supplier</td>
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<tr>
<td>Mold Compound_EME-G770_Sumitomo</td>
<td>M-011 Other inorganic materials</td>
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<td>mg</td>
<td>supplier</td>
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<tr>
<td>Bonding wire_WIRE AG SI TYPE_MKE</td>
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<tr>
<td>Bonding wire_WIRE AG SI TYPE_MKE</td>
<td>Bonding Wire</td>
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<tr>
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<tr>
<td>Bonding wire_WIRE AG SI TYPE_MKE</td>
<td>Bonding Wire</td>
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<tr>
<td>Anode Ball_Pure Tin_Nuo Nengda</td>
<td>M-011 Other inorganic materials</td>
<td>3,693</td>
<td>mg</td>
<td>supplier</td>
</tr>
<tr>
<td>Lead frame_C7+AG_HDS</td>
<td>Copper &amp; its alloys</td>
<td>53,878</td>
<td>mg</td>
<td>supplier</td>
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<tr>
<td>Lead frame_C7+AG_HDS</td>
<td>Copper &amp; its alloys</td>
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<td>Copper &amp; its alloys</td>
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<td>supplier</td>
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<td>Lead frame_C7+AG_HDS</td>
<td>Copper &amp; its alloys</td>
<td>3,394</td>
<td>mg</td>
<td>supplier</td>
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