



## Materials Declaration Form


<b>IPC Form Type *</b>	<b>1752 Distribute</b>	<b>Version</b>	<b>2</b>
<b>Sectionals *</b>	<b>Material Info Manufacturing Info</b>	<b>Subsectionals *</b>	<b>A-D</b>

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>28-06-2018</b>
<b>Company Unique ID</b>	<b>NL 008751171B01</b>		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	<b>MDG MD CHAMPION</b>	<b>Representative Title</b>	<b>MDG MD CHAMPION</b>
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

Uncertainty Statement			
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Legal Statement			
<b>Supplier Acceptance *</b>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
<b>Legal Statement</b>	<p>Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32L051T6Y6TR	H32A*417CCCX	A	9989	28-06-2018
	Amount	UoM	Unit type	ST ECOPACK Grade
	5.95	mg	Each	ECOPACK® 2
	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				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Solder ball SACN125 0.23mm	NAC	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
WLCSP	Not Applicable	25	No lead	
Comment	Package : A046 WLCSP 25L DIE 425 8572342			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	TRUE
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)	FALSE
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description

QueryList : REACH-12th January 2017				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration :						Mfr Item Name	H32A*417CCCX				8999999.0	999877.8
note : Substance present with less 0.001mg will not be declared in this document												
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	4.411	mg	supplier	die	Silicon (Si)	7440-21-3		4.260	mg	965767	715914
				supplier	metallization	Aluminium (Al)	7429-90-5		0.013	mg	2947	2185
				supplier	metallization	Copper (Cu)	7440-50-8		0.044	mg	9975	7394
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.005	mg	1134	840
				supplier	metallization	Titanium (Ti)	7440-32-6		0.007	mg	1587	1176
				supplier	Passivation	Silicon Nitride	12033-89-5		0.012	mg	2720	2017
				supplier	Passivation	Silicon Oxide	7631-86-9		0.070	mg	15869	11764
RDL-Ti Target	M-011 Other inorganic materials	0.001	mg	Supplier	Metals	Titanium	7440-32-6		0.001	mg	1000000	132
RDL-Cu Target	M-011 Other inorganic materials	0.003	mg	Supplier	Metals	Copper	7440-50-8		0.003	mg	1000000	523
RDL-Cu Anode	M-011 Other inorganic materials	0.062	mg	Supplier	Metals	Copper	7440-50-8		0.062	mg	1000000	10492
UBM-Ti Target	M-011 Other inorganic materials	0.000	mg	Supplier	Metals	Titanium	7440-32-6		0.000	mg	1000000	72
UBM-Cu Target	M-011 Other inorganic materials	0.002	mg	Supplier	Metals	Copper	7440-50-8		0.002	mg	1000000	285
UBM-Cu Anode	M-011 Other inorganic materials	0.073	mg	Supplier	Metals	Copper	7440-50-8		0.073	mg	1000000	12302
SOLDER BALLS SACN125 0.23mm	Solder	1.179	mg	Supplier	Metals	Tin	7440-31-5		1.146	mg	972569	192631
				Supplier	Metals	Silver	7440-22-4		0.014	mg	11970	2371
				Supplier	Metals	Copper	7440-50-8		0.018	mg	15461	3062
Backside Tape - LC2850	M-011 Other inorganic materials	0.218	mg	Supplier	Plastics/polymers	Polyethylene terephthalate	25038-59-9		0.154	mg	702811	25805
				Supplier	Plastics/polymers	Silica	Proprietary		0.034	mg	155622	5714
				Supplier	Plastics/polymers	Release agent	Proprietary		0.000	mg	1004	37
				Supplier	Plastics/polymers	Acrylic ester co-polymer	Proprietary		0.014	mg	65261	2396
				Supplier	Plastics/polymers	Epoxy resin	Proprietary		0.014	mg	65261	2396
				Supplier	Plastics/polymers	Carbon black	Proprietary		0.001	mg	5020	184
				Supplier	Plastics/polymers	Additive	Proprietary		0.001	mg	5020	184