



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2017-01-26</b>
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
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<b>Representative Phone *</b>	(+33) 442 688 339	<b>Representative Email *</b>	<a href="mailto:patrick.crudo@st.com">patrick.crudo@st.com</a>
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/online_tech_support.html">http://www.st.com/web/en/support/online_tech_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>
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**Legal Statement**

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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32L072C8Y6TR	H451*447CCCZ	A	9989	2017-01-26
	Amount	UoM	Unit type	ST ECOPACK Grade
	9.580	mg	Each	ECOPACK® 2

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	
SACN125	NAC	NAC		

Package Designator	Size	Nbr of instances	Shape	
WLCSP	NAC	49	No lead	
Comment	Package: WLCSP 49L DIE 447 P 0.4MM			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-12th January 2017				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	H451*447CCCZ					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	6.296	mg	supplier	die	Silicon (Si)	7440-21-3		5.921	mg	940438	618078
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	4288	2818
Die				supplier	metallization	Copper (Cu)	7440-50-8		0.088	mg	13977	9186
Die				supplier	metallization	Tantalum (Ta)	7440-25-7		0.081	mg	12865	8455
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.013	mg	2065	1357
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	159	104
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.023	mg	3653	2401
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.142	mg	22554	14823
Coating-P11-Hitachi Chemical,HD4100	Other inorganic materials	0.057	mg	supplier	Plastics/polymers	PD-9 Resin	57987-55-0		0.040	mg	700000	4195
Coating-P11-Hitachi Chemical,HD4100				supplier	Organic compounds	Trifluoroacetic Anhydride	407-25-0		0.003	mg	50000	300
Coating-P11-Hitachi Chemical,HD4100				supplier	Acrylates	Tetraethylene Glycol Dimethacrylate	109-17-1		0.009	mg	150000	899
Coating-P11-Hitachi Chemical,HD4100				supplier	Organic compounds	4,4'-Oxydiphthalic Anhydride	1823-59-2		0.003	mg	50000	300
Coating-P11-Hitachi Chemical,HD4100				supplier	Acrylates	2-Hydroxyethyl Methacrylate	868-77-9		0.003	mg	50000	300
Coating-P12-Hitachi Chemical,HD4100	Other inorganic materials	0.050	mg	supplier	Plastics/polymers	PD-9 Resin	Proprietary		0.034	mg	685714	3596
Coating-P12-Hitachi Chemical,HD4100				supplier	Organic compounds	Trifluoroacetic Anhydride	407-25-0		0.003	mg	57143	300
Coating-P12-Hitachi Chemical,HD4100				supplier	Acrylates	Tetraethylene Glycol Dimethacrylate	109-17-1		0.007	mg	142857	749
Coating-P12-Hitachi Chemical,HD4100				supplier	Organic compounds	4,4'-Oxydiphthalic Anhydride	1823-59-2		0.003	mg	57143	300
Coating-P12-Hitachi Chemical,HD4100				supplier	Acrylates	2-Hydroxyethyl Methacrylate	868-77-9		0.003	mg	57143	300
RDL-Ti Target	Other inorganic materials	0.001	mg	supplier	Alloy	Titanium	7440-32-6		0.001	mg	1000000	150
RDL-Cu Target	Other inorganic materials	0.004	mg	supplier	Alloy	Copper	7440-50-8		0.004	mg	1000000	449
RDL-Cu Anode	Other inorganic materials	0.060	mg	supplier	Alloy	Copper	7440-50-8		0.060	mg	1000000	6293
UBM-Ti Target	Other inorganic materials	0.001	mg	supplier	Alloy	Titanium	7440-32-6		0.001	mg	1000000	150
UBM-Cu Target	Other inorganic materials	0.009	mg	supplier	Alloy	Copper	7440-50-8		0.009	mg	1000000	899
UBM-Cu Anode	Other inorganic materials	0.360	mg	supplier	Alloy	Copper	7440-50-8		0.360	mg	1000000	37607
Solder Ball-Senju,Sn98.25 Ag1.2 Cu0.5	Other inorganic materials	2.296	mg	supplier	Solder	Tin	7440-31-5		2.257	mg	982810	235573
Solder Ball-Senju,Sn98.25 Ag1.2 Cu0.5				supplier	Solder	Silver	7440-22-4		0.027	mg	11855	2842
Solder Ball-Senju,Sn98.25 Ag1.2 Cu0.5				supplier	Solder	Copper	7440-50-8		0.011	mg	4742	1137
Solder Ball-Senju,Sn98.25 Ag1.2 Cu0.5				supplier	Solder	Nickel	7440-02-0		0.001	mg	593	142
Backside Tape-LC2850	Other inorganic materials	0.444	mg	supplier	Polymers	Silica (Adhesive)	Trade Secret		0.250	mg	563107	26070
Backside Tape-LC2850				supplier	Polymers	Epoxy resin (adhesive)	Trade Secret		0.093	mg	210356	9739
Backside Tape-LC2850				supplier	Polymers	Acrylic resin (adhesive) black	Trade Secret		0.093	mg	210356	9739
Backside Tape-LC2850				supplier	Polymers	Carbon black	Trade Secret		0.007	mg	16181	749