Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D *** : Required Field***

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-08-23
Contact Name *	Refer to " Supplier Comment" section	Contact Title	Refer to " Supplier Comment" section
Contact Phone *	Refer to " Supplier Comment" section	Contact Email *	Refer to " Supplier Comment" section
Authorized Representative *	Laurent TOSI	Representative Title	MMS MD CHAMPION
Representative Phone *	33 442 685 795	Representative Email *	laurent.tosi@st.com
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_support.html		

Uncertainty Statement

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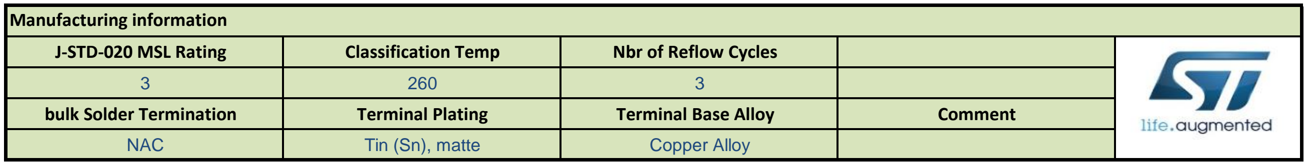
Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard

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 omprehensive 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**
STM32L021K4T6	B25V*457XXXZ	A	9988	2016-08-23
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	180.00	mg	Each	ECOPACK® 2



Manufacturing information				
J-STD-020 MSL Rating	**Classification Temp**	**Nbr of Reflow Cycles**		
3	260	3		
bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	**Size**	**Nbr of instances**	**Shape**	
QFP	7x7x1.4	32	L bend	
Comment	LQFP 32 7x7x1.4			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	**Response**
Product(s) meets EU RoHS requirement without any exemptions	**true**
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-20th June 2016	
Query	**Response**
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH	**true**

Note :	SVHC content below threshold reported for information only			
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Hexahydro-4-methylphthalic anhydrid	1000 ppm	0.036	in die attach material embedded in package	200

Material Composition Declaration						Mfr Item Name	B25V*457XXXZ					
Homogeneous Material	**Material Group**	**Mass**	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
die (s)	Other inorganic materials	4.185	mg	supplier	die	Silicon (Si)	7440-21-3		4.051	mg	967981	22506
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.011	mg	2628	61
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.048	mg	11470	267
die (s)				supplier	metallization	Tantalum (Ta)	7440-25-7		0.001	mg	239	6
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	1195	28
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.010	mg	2389	56
die (s)				supplier	passivation	Indium Tin oxide (In203:SnO2)	50926-11-9		0.059	mg	14098	328
Lead-frame	Other inorganic materials	60.510	mg	supplier	alloy	Copper (Cu)	7440-50-8		58.225	mg	962239	323472
Lead-frame				supplier	alloy	Nickel (Ni)	7440-02-0		1.804	mg	29811	10021
Lead-frame				supplier	alloy	Silicium (Si)	7440-21-3		0.391	mg	6459	2171
Lead-frame				supplier	alloy	Magnesium (Mg)	7439-95-4		0.090	mg	1491	501
Die Attach	Other inorganic materials	1.198	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		0.911	mg	760000	5058
Die Attach				supplier	glue or soft solder	2,2'-[methylenebis(phenyleneoxymethylene)]b	39817-09-9		0.090	mg	75000	499
Die Attach				supplier	glue or soft solder	Dodecenylsuccinic anydride	25377-73-5		0.090	mg	75000	499
Die Attach				supplier	glue or soft solder	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.036	mg	30000	200
Die Attach				supplier	glue or soft solder	Hexahydro-4-methylphthalic anhydride	19438-60-9		0.036	mg	30000	200
Die Attach				supplier	glue or soft solder	1,4-bis(2,3-epoxypropoxy)butane	2425-79-8		0.036	mg	30000	200
Wires	Other inorganic materials	0.780	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.780	mg	1000000	4332
Encapsulation	Other inorganic materials	109.240	mg	supplier	Moulding Compound	Solid Epoxy Resin	na		7.660	mg	70124	42558
Encapsulation				supplier	Moulding Compound	Phenol Resin	na		5.472	mg	50089	30398
Encapsulation				supplier	Moulding Compound	Silica, vitreous	60676-86-0		95.397	mg	873276	529983
Encapsulation				supplier	Moulding Compound	Carbon-black	1333-86-4		0.547	mg	5009	3040
Encapsulation				supplier	Moulding Compound	Bismuth (Bi)	7440-69-9		0.164	mg	1503	912
Finishing	Other inorganic materials	4.087	mg	supplier	connections coating	Tin (Sn)	7440-31-5		4.087	mg	1000000	22706