Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-05-10
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	LAURENT TOSI	Representative Title	MDG 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/support.html		

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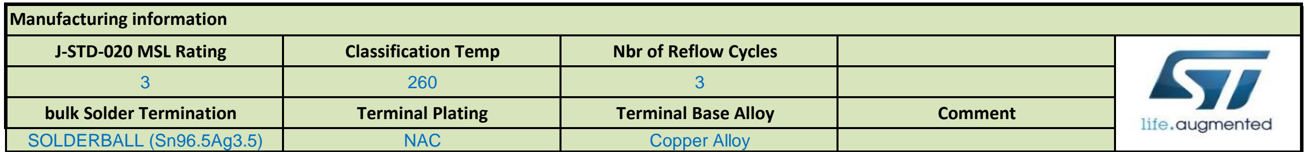
Legal Statement

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
STM32L462REI6	P02I*462XXXY	A	9996	2017-05-10
	Amount	UoM	Unit type	ST ECOPACK Grade
	26.80	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		
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
SOLDERBALL (Sn96.5Ag3.5)	NAC	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	5x5x0.6	64	No lead	
Comment	Package: A019 UFBGA 5X5X0.6 64L P 0.5 MM 8526322			

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 : note : Substance present with less 0.001mg will not be declared in this document						**Mfr Item Name**	**P02I*462XXXY**					
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	2.613	mg	supplier	die	Silicon (Si)	7440-21-3		2.189	mg	837734	81679
				supplier	metallization	Aluminium (Al)	7429-90-5		0.020	mg	7654	746
				supplier	metallization	Copper (Cu)	7440-50-8		0.180	mg	68886	6716
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.058	mg	22197	2164
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	765	75
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	765	75
				supplier	Passivation	Silicon Nitride	12033-89-5		0.046	mg	17604	1716
				supplier	Passivation	Silicon Oxide	7631-86-9		0.116	mg	44393	4328
SUBSTRATE (DS7409HGB)	Other inorganic materials	11.193	mg	supplier	CORE	Glass Cloth	65997-17-3		0.950	mg	84900	35458
				supplier	CORE	Epoxy resin	61788-97-4		0.224	mg	20000	8353
				supplier	CORE	Flame resistant epoxy resin	223769-10-6		0.224	mg	20000	8353
				supplier	CORE	Heat resistant resin	25722-66-1		0.224	mg	20000	8353
				supplier	CORE	Silica filler	7631-86-9		0.559	mg	49900	20841
				supplier	CORE	Metal Hydroxide	Proprietary		0.056	mg	5000	2088
				supplier	COPPER FOIL	Copper (Cu)	7440-50-8		2.235	mg	199700	83405
				supplier	SOLDERMASK	Talc containing no asbestiform fibers	14807-96-6		0.068	mg	6100	2548
				supplier	SOLDERMASK	Barium sulfate	7727-43-7		1.101	mg	98400	41097
				supplier	SOLDERMASK	Dipropylene monomethyl ether	34590-94-8		0.326	mg	29100	12154
				supplier	SOLDERMASK	Napthalene	91-20-3		0.034	mg	3000	1253
				supplier	SOLDERMASK	Morpholine derivative	Proprietary		0.168	mg	15000	6265
				supplier	CU PLATING	Copper (Cu)	7440-50-8		4.305	mg	384600	160628
				supplier	NI PLATING	Nickel (Ni)	7440-02-0		0.644	mg	57500	24015
				supplier	AU PLATING	Gold (Au)	7440-57-5		0.076	mg	6800	2840
DIE ATTACH (ATB-130U)	Other inorganic materials	0.716	mg	supplier	GLUE	Butadiene,acrylonitrile polymer,carboxy-termi	68610-41-3		0.501	mg	700000	18707
				supplier	GLUE	Phenol-formaldehyde polymer	9003-35-4		0.072	mg	100000	2672
				supplier	GLUE	Phenol polymer with formaldehyde,glycidyl et	28064-14-4		0.066	mg	92000	2459
				supplier	GLUE	Dapsone	80-08-0		0.069	mg	97000	2592
				supplier	GLUE	Reaction product bisphenol-A-(epichlorhydrin	25068-38-6		0.007	mg	10000	267
				supplier	GLUE	4,4, Isopropylidenediphenol	80-05-7		0.001	mg	1000	27
BONDING WIRE (MKE 4N)	Other inorganic materials	0.288	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.288	mg	1000000	10742
SOLDERBALL (Sn96.5Ag3.5)	Other inorganic materials	1.987	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		1.918	mg	964978	71556
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.070	mg	35022	2597
ENCAPSULATION (GE-100LFCS)	Other inorganic materials	10.003	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		8.960	mg	895757	334325
				supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		0.469	mg	46909	17508
				supplier	MOLDING COMPOUND	Phenol resin	Proprietary		0.417	mg	41697	15563
				supplier	MOLDING COMPOUND	Metal Hydroxide	Proprietary		0.104	mg	10424	3891
				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.052	mg	5212	1945