



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 *	2017-01-11
Contact Name *	Refer to Supplier comment section	Contact Title	Refer to Supplier comment section
Authorized Representative *	Laurent TOSI / Luc PETIT	Representative Title	MDG group Material Declaration Champion
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement

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Legal Statement	
Supplier Acceptance *	Legal Declaration *
true	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 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
STM32L151RBH6	U3R8*416XXXV	B	MU1A	2017-01-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	64	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			

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
SACN125	NAC	Copper Alloy	



Package Designator	Size	Nbr of instances	Shape
BGA	5 x 5	64	bulk solder
Comment	TFBGA 5x5x1.2 64 F8x8 0.5		

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

Query : California Prop65 list, dated 21st October 2016			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.08	Substrate metallization	1281

QueryList : REACH-20th June 2016				
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
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Homogeneous Material (mg)	Application - Homogeneous Material	ppm in Homogeneous Material

Material Composition Declaration						Mfr Item Name	U3R8*416XXV		64.0000		600000.0	1000005.0				
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 or Wafer (choose)	Other inorganic materials	7.097	mg	supplier	die	Silicon (Si)	7440-21-3		6.749	mg	950966	105453				
				supplier	metallisation	Aluminium (Al)	7429-90-5		0.028	mg	3945	438				
				supplier	metallisation	Copper (Cu)	7440-50-8		0.122	mg	17190	1906				
				supplier	metallisation	Tantalum (Ta)	7440-25-7		0.008	mg	1127	125				
				supplier	metallisation	Titanium (Ti)	7440-32-6		0.014	mg	1973	219				
				supplier	metallisation	Tungsten (W)	7440-33-7		0.001	mg	141	16				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.025	mg	3523	391				
				supplier	passivation	Silicon Oxide	7631-86-9		0.150	mg	21136	2344				
				supplier	core material	Bismaleimide (B)	105391-33-1		0.774	mg	45234	12094				
				supplier	core material	Triazine (T)	25722-66-1		0.774	mg	45234	12094				
substrate	Other Organic Materials	17.111	mg	supplier	core material	Fiber glass	65997-17-3		2.310	mg	135001	36094				
				supplier	core material	Thermosetting resin	54208-63-8		1.297	mg	75799	20266				
				supplier	core material	metal hydroxide	21645-51-2		0.053	mg	3097	828				
				supplier	core material	Calcium sulfate	7778-18-9		0.026	mg	1519	406				
				supplier	core material	Zinc hydroxide	20427-58-1		0.016	mg	935	250				
				supplier	Solder mask	Barium sulfate	7727-43-7		0.212	mg	12390	3313				
				supplier	Solder mask	Acrylic resin	9003-01-4		0.328	mg	19169	5125				
				supplier	Solder mask	Epoxy resin	29690-82-2		0.258	mg	15078	4031				
				supplier	Solder mask	Biphenyl epoxy resin	85954-11-6		0.160	mg	9351	2500				
				supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6		0.123	mg	7188	1922				
				supplier	Solder mask	Methoxymethylethoxy propanol	34590-94-8		0.035	mg	2045	547				
				supplier	Solder mask	Amorphous silica	7631-86-9		0.024	mg	1403	375				
				supplier	Solder mask	3-methyl-methoxy-buthyl	103429-90-9		0.016	mg	935	250				
				supplier	Solder mask	Silica Cristobalite	14464-46-1		0.012	mg	701	188				
				supplier	Solder mask	Morpholine derivative	Proprietary		0.006	mg	351	94				
				supplier	metallisation	Copper (Cu)	7440-50-8		10.586	mg	618666	165406				
				supplier	metallisation	Nickel (Ni)	7440-02-0		0.080	mg	4675	1250				
				supplier	metallisation	Gold (Au)	7440-57-5		0.021	mg	1227	328				
				Die attach	Other Organic Materials	1.331	mg	supplier	glue	Silver (Ag)	7440-22-4		0.998	mg	749812	15594
								supplier	glue	Epoxy Cresol Novolak	29690-82-2		0.329	mg	247183	5141
supplier	glue	1-isopropyl-2,2-dimethyltrimethylene diisobu	6846-50-0						0.003	mg	2254	47				
supplier	glue	tert-butanol	75-65-0						0.001	mg	751	16				
Bonding wire	Precious metals	0.372	mg	supplier	wire	Gold (Au)	7440-57-5		0.372	mg	1000000	5813				
encapsulation	Other Organic Materials	31.456	mg	supplier	mold compound	Silica, vitreous	60676-86-0		25.636	mg	814980	400563				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		3.146	mg	100013	49156				
				supplier	mold compound	Phenol resin	205830-20-2		1.573	mg	50006	24578				
				supplier	mold compound	Magnesium dihydroxide	1309-42-8		0.032	mg	1017	500				
				supplier	mold compound	Quartz	14808-60-7		0.786	mg	24987	12281				
				supplier	mold compound	Carbon Black	1333-86-4		0.283	mg	8997	4422				
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.517	mg	982512	101828				
solder balls	Solder	6.633	mg	supplier	solder alloy	Silver (Ag)	7440-22-4		0.080	mg	12061	1250				
				supplier	solder alloy	Copper (Cu)	7440-50-8		0.033	mg	4975	516				
				supplier	solder alloy	Nickel (Ni)	7440-02-0		0.002	mg	302	31				
				JIG - R	solder alloy	Lead (Pb)	7439-92-1		0.001	mg	151	16				