



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Sectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-01-23
Contact Name *	Refer to Supplier comment section	Contact Title	Refer to Supplier comment section
Authorized Representative *	Floriana SAN BIAGIO	Representative Title	AMS MD 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 *	true	Legal Declaration *	Standard
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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
	21CB*MV4MBAB	B	MA1A	2018-01-23
Amount	UoM	Unit type	ST ECOPACK Grade	
108	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		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nickel/Gold (Ni/Au)	other		

Package Designator	Size	Nbr of instances	Shape	
LGA	5 x 5 x 1.7	16	flat	
Comment	Package:A01K LGA 5X5X1.7 16LD CERAMIC CAVITY; MDF valid for LIS3DHHTR			

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	FALSE
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)	TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description
7c-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devi

QueryList : REACH-15th January 2018				
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	21CB*MV4MBAB						
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)	
Dies	Other inorganic materials	14.079	mg	supplier	die	Silicon (Si)	7440-21-3		13.444	mg	954897	124481	
				supplier	metallisation	Aluminium (Al)	7429-90-5		0.021	mg	1492	194	
				supplier	metallisation	Copper (Cu)	7440-50-8		0.018	mg	1278	167	
				supplier	metallisation	Tantalum (Ta)	7440-25-7		0.004	mg	284	37	
				supplier	metallisation	Titanium (Ti)	7440-32-6		0.006	mg	426	56	
				supplier	metallisation	Tungsten (W)	7440-33-7		0.002	mg	142	19	
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.014	mg	994	130	
				supplier	passivation	Silicon Oxide	7631-86-9		0.083	mg	5895	769	
					JIG - R	die glass coating	Lead-Borate Glass	65997-18-4	7c-1-Electrical and electror	0.487	mg	34591	4509
				Die attach	Other Organic Materials	0.263	mg	supplier	tape	epoxy resin	Proprietary		0.167
supplier	tape	polyolefin	9003-07-0						0.083	mg	315589	769	
supplier	tape	Diphenol Propane Diglycidyl Ether	1675-54-3						0.013	mg	49430	120	
supplier	glue	diglycidyl Bisphenol F	39817-09-9						0.087	mg	437186	806	
Die attach 2	Other Organic Materials	0.199	mg	supplier	glue	epoxypropoxy butane polymer	2425-79-8		0.040	mg	201005	370	
				supplier	glue	Silica vitrous	60676-86-0		0.039	mg	195980	361	
				supplier	glue	Epoxy resin	68475-94-5		0.020	mg	100503	185	
				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.006	mg	30151	56	
				supplier	glue	imidazole derivate	Proprietary		0.006	mg	30151	56	
				supplier	glue	Disilaoctadecan polymer	40372-72-3		0.001	mg	5025	9	
				supplier	wire	Gold (Au)	7440-57-5		0.128	mg	1000000	1185	
Bonding wire	Precious metals	0.128	mg	supplier	wire	Gold (Au)	7440-57-5		0.128	mg	1000000	1185	
				supplier	ceramic	Alumina	1344-28-1		26.447	mg	885997	244880	
				supplier	ceramic	Manganese oxide	1313-13-9		1.015	mg	34003	9398	
				supplier	ceramic	Silica	7631-86-9		0.866	mg	29012	8019	
				supplier	ceramic	Titanium oxide	13663-67-7		0.537	mg	17990	4972	
				supplier	ceramic	Chromium oxide	1308-38-9		0.418	mg	14003	3870	
				supplier	ceramic	Iron oxide	1309-37-1		0.328	mg	10988	3037	
				supplier	ceramic	Magnesium oxide	1309-48-4		0.149	mg	4992	1380	
				supplier	ceramic	Cobalt oxide	1308-06-1		0.090	mg	3015	833	
				Ceramic base	Ceramics / Glass	63.667	mg	supplier	ceramic	Alumina	1344-28-1		51.716
supplier	ceramic	Manganese oxide	1313-13-9						1.973	mg	30989	18269	
supplier	ceramic	Silica	7631-86-9						1.687	mg	26497	15620	
supplier	ceramic	Titanium oxide	13663-67-7						1.051	mg	16508	9731	
supplier	ceramic	Chromium oxide	1308-38-9						0.796	mg	12503	7370	
supplier	ceramic	Iron oxide	1309-37-1						0.637	mg	10005	5898	
supplier	ceramic	Magnesium oxide	1309-48-4						0.287	mg	4508	2657	
supplier	ceramic	Cobalt oxide	1308-06-1						0.159	mg	2497	1472	
supplier	metallization	Tungsten (W)	7440-33-7						4.457	mg	70005	41269	
supplier	metallization	Molybdenum	7439-98-7						0.446	mg	7005	4130	
supplier	metallization	Nickel (Ni)	7440-02-0						0.382	mg	6000	3537	
supplier	metallization	Gold (Au)	7440-57-5						0.076	mg	1194	704	