



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-05-16
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 *	Rossana Bonaccorso	Representative Title	ADG 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

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
	A9A4*FE72BEQ	A	MA1A	2017-05-16
Amount	UoM	Unit type	ST ECOPACK Grade	
1650.00	mg	Each	ECOPACK® 2	

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/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	24x24x1.4	176	flat	
Comment	Package: LQFP 176L 24X24X1.4 Exposed Pad. MDF valid for CPs: SPC574K72E7BC6AR - SPC574K72E7C6FAR - SPC574K72E7C6FAY			

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	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-12th January 2017				
Query				Response
The product 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	A9A4*FE72BEQ					
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	47.100	mg	supplier	die	Silicon (Si)	7440-21-3		44.110	mg	936518	26733
				supplier	metallization	Aluminium (Al)	7429-90-5		0.064	mg	1359	39
				supplier	metallization	Copper (Cu)	7440-50-8		0.386	mg	8195	234
				supplier	metallization	Tantalum (Ta)	7440-25-7		2.131	mg	45244	1292
				supplier	metallization	Titanium (Ti)	7440-32-6		0.017	mg	361	10
				supplier	metallization	Tungsten (W)	7440-33-7		0.003	mg	64	2
				supplier	metallization	Nickel (Ni)	7440-02-0		0.002	mg	43	1
				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.088	mg	1868	53
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.299	mg	6348	181
				Leadframe	Copper & its alloys	433.743	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						9.885	mg	22790	5991
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.595	mg	1372	361
supplier	alloy	Zinc (Zn)	7440-66-6						0.518	mg	1194	314
supplier	metallization	Nickel (Ni)	7440-02-0						2.268	mg	5229	1375
supplier	metallization	Palladium (Pd)	7440-05-3						0.145	mg	334	88
supplier	metallization	Gold (Au)	7440-57-5						0.061	mg	141	37
Die attach	Other Organic Materials	8.363	mg	supplier	glue or tape	Bismaleimide resin	35325-39-4		0.251	mg	30013	152
				supplier	glue or tape	Isobornyl Methacrylate	7534-94-3		0.627	mg	74973	377
				supplier	glue or tape	Silver (Ag)	7440-22-4		7.485	mg	895014	4536
				supplier	wire	Copper (Cu)	7440-50-8		1.931	mg	1000000	1170
Encapsulation	Other Organic Materials	1158.863	mg	supplier	mold compound	Epoxy Resin	25068-38-6		84.795	mg	73171	51391
				supplier	mold compound	Phenol Resin	29690-82-2		84.795	mg	73171	51391
				supplier	mold compound	Silica, vitreous	60676-86-0		976.836	mg	842926	592022
				supplier	mold compound	Quartz	14808-60-7		3.392	mg	2928	2058
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		5.653	mg	4877	3426
				supplier	mold compound	Carbon black	1333-86-4		3.392	mg	2927	2056