



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 *	2017-08-30
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Floriana San Biagio	Representative Title	AMG 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
	18V0*UAS4ABA	A	CA2A	2017-08-30
	Amount	UoM	Unit type	ST ECOPACK Grade
	130.00	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		 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	
QFN	7x7x1	48	No lead	
Comment	Package: V0 VFQFPN 7x7x1.0 48 PITCH 0.5; MDF valid for ST75MMTR			

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-7th July 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	18V0*UAS4ABA									
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	8.047	mg	supplier	die	Silicon (Si)	7440-21-3		7.709	mg	957997	59300				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.079	mg	9817	608				
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	124	8				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	746	46				
				supplier	metallization	Tungsten (W)	7440-33-7		0.007	mg	870	54				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.021	mg	2610	162				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.149	mg	18516	1146				
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.006	mg	746	46				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.016	mg	1988	123				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.053	mg	6586	408				
				supplier	alloy	Copper (Cu)	7440-50-8		35.401	mg	991902	272315				
				supplier	alloy	Iron (Fe)	7439-89-6		0.018	mg	504	138				
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.028	mg	785	215				
Leadframe	Copper & its alloys	35.690	mg	supplier	metallization	Nickel (Ni)	7440-02-0		0.223	mg	6248	1715				
				supplier	metallization	Palladium (Pd)	7440-05-3		0.014	mg	392	108				
				supplier	metallization	Gold (Au)	7440-57-5		0.006	mg	168	46				
				supplier	alloy	Silver (Ag)	7440-22-4		1.995	mg	799599	15346				
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.028	mg	785	215				
Die attach	Other Organic Materials	2.495	mg	supplier	glue	methylenediacylate	42594-17-2		0.334	mg	133868	2569				
				supplier	glue	Dicyclopentylmethoxyethyl methacrylate	68586-19-6		0.062	mg	24850	477				
				supplier	glue	Polybutadiene Anhydride	Proprietary		0.075	mg	30060	577				
				supplier	glue	Epoxy-cyclohexylethyltrimethoxysilane	3388-04-3		0.013	mg	5210	100				
				supplier	glue	Bis(α,α-dimethylbenzyl) peroxide	80-43-3		0.013	mg	5210	100				
				supplier	glue	Palladium (Pd)	7440-05-3		0.003	mg	1202	23				
				supplier	wire	Gold (Au)	7440-57-5		1.459	mg	989824	11223				
Bonding wires	Precious metals	1.474	mg	supplier	wire	Palladium (Pd)	7440-05-3		0.015	mg	10176	115				
				supplier	compound	silica vitreous	60676-86-0		70.196	mg	852990	539969				
				supplier	mold compound	epoxy resin	29690-82-2		3.292	mg	40003	25323				
				supplier	mold compound	Phenol resin	25068-38-6		2.880	mg	34996	22154				
				supplier	mold compound	Magnesium hydroxide	1309-42-8		3.292	mg	40003	25323				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		1.646	mg	20001	12662				
				supplier	mold compound	Zinc hydroxide	20427-58-1		0.823	mg	10001	6331				
				supplier	mold compound	carbon black	1333-86-4		0.165	mg	2005	1269				
				Encapsulation	Other Organic Materials	82.294	mg	supplier	compound	silica vitreous	60676-86-0		70.196	mg	852990	539969
								supplier	mold compound	epoxy resin	29690-82-2		3.292	mg	40003	25323
supplier	mold compound	Phenol resin	25068-38-6						2.880	mg	34996	22154				
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