



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 *	2017-09-05
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
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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
	8NWA*UK37ABA	A	Z7GA	2017-09-05
Amount	UoM	Unit type	ST ECOPACK Grade	
42.00	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		

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	
tin is used or other bulk terminat	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	4x4x1	10	No lead	
Comment	Package: A0WA VFDFPN 4X4X1.0 10L PITCH 0.50; MDF valid for A6984TR			

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						Mfr Item Name	8NWA*UK37ABA					
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	2.811	mg	supplier	die	Silicon (Si)	7440-21-3		2.637	mg	938100	62786
				supplier	metallization	Aluminium (Al)	7429-90-5		0.023	mg	8182	548
				supplier	metallization	Tungsten (W)	7440-33-7		0.037	mg	13163	881
				supplier	Passivation	Silicon Nitride	12033-89-5		0.006	mg	2134	143
				supplier	Passivation	Silicon Oxide	7631-86-9		0.054	mg	19210	1286
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	711	48
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	1779	119
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.018	mg	6403	429
				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.002	mg	711	48
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.027	mg	9605	643
Leadframe	Copper & its alloys	18.310	mg	supplier	alloy	Copper (Cu)	7440-50-8		17.837	mg	974167	424690
				supplier	alloy	Zinc (Zn)	7440-66-6		0.023	mg	1256	548
				supplier	alloy	Iron (Fe)	7439-89-6		0.430	mg	23484	10238
				supplier	alloy	Phosphorus (P)	7723-14-0		0.015	mg	819	357
				supplier	metallization	Silver (Ag)	7440-22-4		0.005	mg	273	119
Die attach	Other Organic Materials	0.554	mg	supplier	glue	Silver (Ag)	7440-22-4		0.452	mg	815884	10762
				supplier	glue	(Octahydro-4,7-methano-1 H-indenediy)bis(m	42594-17-2		0.033	mg	59567	786
				supplier	glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl met	7534-94-3		0.033	mg	59567	786
				supplier	glue	Isobornyl acrylate	5888-33-5		0.033	mg	59567	786
				supplier	glue	Bis(alpha,alpha-Dimethylbenzyl) peroxide	80-43-3		0.003	mg	5415	71
Bonding wires	Precious metals	0.151	mg	supplier	wire	Gold (Au)	7440-57-5		0.151	mg	1000000	3595
Encapsulation	Other Organic Materials	18.785	mg	supplier	mold compound	Silica fused	60676-86-0		17.000	mg	904977	404762
				supplier	mold compound	Epoxy resin	29690-82-2		0.883	mg	47006	21024
				supplier	mold compound	Phenol resin	25068-38-6		0.883	mg	47006	21024
				supplier	mold compound	Carbon black	1333-86-4		0.019	mg	1011	452
Connections coating	Other inorganic materials	1.389	mg	supplier	coating	Tin (Sn)	7440-31-5		1.389	mg	1000000	33071