



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 *	2018-03-14
Company Unique ID	NL 008751171801		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	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
	A5)9*UA38AF1	A	ZW1A	2018-03-14
Amount	UoM	Unit type	ST ECOPACK Grade	
44	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	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	3.5x5	26	flat	
Comment)9 VFDFPN 26L 3.5X5 0.5 PTH; MDF valid for L6360			

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-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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	A5j9*UA38A1				4999999.0	999928.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	2.709	mg	supplier	die	Silicon (Si)	7440-21-3		2.532	mg	934662	57545
				supplier	metallization	Aluminium (Al)	7429-90-5		0.031	mg	11443	705
				supplier	metallization	Tungsten (W)	7440-33-7		0.025	mg	9228	568
				supplier	Passivation	Silicon Nitride	12033-89-5		0.007	mg	2584	159
				supplier	Passivation	Silicon Oxide	7631-86-9		0.053	mg	19564	1205
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	738	45
				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	2215	136
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.021	mg	7752	477
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.032	mg	11812	727
				supplier								
Leadframe	M-004 Copper and its alloys	23.311	mg	supplier	alloy	Copper (Cu)	7440-50-8		22.328	mg	957831	507455
				supplier	alloy	Iron (Fe)	7439-89-6		0.538	mg	23079	12227
				supplier	alloy	Phosphorus (P)	7723-14-0		0.007	mg	300	159
				supplier	alloy	Zinc (Zn)	7440-66-6		0.027	mg	1158	614
				supplier	metallization	Nickel (Ni)	7440-02-0		0.395	mg	16945	8977
				supplier	metallization	Palladium (Pd)	7440-05-3		0.011	mg	472	250
				supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	129	68
				supplier	metallization	Silver (Ag)	7440-22-4		0.002	mg	86	45
				supplier	glue	Silver (Ag)	7440-22-4		0.626	mg	851701	14227
				supplier								
Die Attach	M-015 Other organic materials	0.735	mg	supplier	glue	Epoxy resin A	9003-36-5		0.055	mg	74830	1250
				supplier	glue	Epoxy resin B	29690-82-2		0.040	mg	54422	909
				supplier	glue	Diluent	3101-60-8		0.011	mg	14966	250
				supplier	glue	Dicyandiamide	461-58-5		0.002	mg	2721	45
				supplier	glue	Amine type hardener	Proprietary		0.001	mg	1361	23
				supplier								
Bonding wires	M-008 Precious metals	0.241	mg	supplier	wire	Gold (Au)	7440-57-5		0.241	mg	1000000	5477
Encapsulation	M-015 Other organic materials	17.001	mg	supplier	Molding compound	Epoxy resin	29690-82-2		0.765	mg	44997	17386
				supplier	Molding compound	Silica (Amorphous) A	60676-86-0		12.751	mg	750015	289795
				supplier	Molding compound	Phenol Resin	25068-38-6		0.765	mg	44997	17386
				supplier	Molding compound	Silica (Amorphous) B	7631-86-9		2.635	mg	154991	59886
				supplier	Molding compound	Carbon Black	1333-86-4		0.085	mg	5000	1932