



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 *	2018-02-27
Contact Name *	Refer to Supplier Comment section		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
	8872*U1REAC5	A	CA2A	2018-02-27
Amount	UoM	Unit type	ST ECOPACK Grade	
29.80	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		
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	3x3x1	16	flat	
Comment	72 VFQFPN 16 3x3x1.0 PITCH 0.50; MDF valid for PM8804TR			

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	8872*U1REACS									
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	1.579	mg	supplier	die	Silicon (Si)	7440-21-2		1.499	mg	949335	50302				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.015	mg	9500	503				
				supplier	metallization	Tungsten (W)	7440-33-7		0.012	mg	7600	403				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.003	mg	1900	101				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.026	mg	16466	872				
				supplier	polymer die coating	PIXI Polyimide	108-65-6		0.008	mg	5066	268				
Leadframe	Copper & its alloys	12.185	mg	supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.016	mg	10133	537				
				supplier	alloy	Copper (Cu)	7440-50-8		11.644	mg	955601	390738				
				supplier	alloy	Nickel (Ni)	7440-02-0		0.363	mg	29791	12181				
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.018	mg	1477	604				
				supplier	alloy	Silicon (Si)	7440-21-3		0.079	mg	6483	2651				
				supplier	metallization	Nickel (Ni)	7440-02-0		0.074	mg	6073	2483				
				supplier	metallization	Palladium (Pd)	7440-05-3		0.005	mg	410	168				
				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	164	67				
				Die attach	Other Organic Materials	0.547	mg	supplier	glue	Silver (Ag)	7440-22-4		0.437	mg	798903	14664
								supplier	glue	methylene diacrylate	42594-17-2		0.073	mg	133455	2450
				supplier	glue	Dicyclopentylxyethyl methacrylate	68586-19-6		0.014	mg	25594	470				
				supplier	glue	Polybutadiene Anhydride	Proprietary		0.016	mg	29250	537				
				supplier	glue	Epoxycyclohexylethyltrimethoxysilane	3388-04-3		0.003	mg	5484	101				
				supplier	glue	Bis(α,α-dimethylbenzyl) peroxide	80-43-3		0.003	mg	5484	101				
				supplier	glue	Palladium (Pd)	7440-05-3		0.001	mg	1828	34				
Bonding wires	Precious metals	0.154	mg	supplier	wire	Gold (Au)	7440-57-5		0.152	mg	987013	5101				
				supplier	wire	Copper (Cu)	7440-50-8		0.001	mg	6494	34				
				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	6494	34				
Encapsulation	Other Organic Materials	15.335	mg	supplier	mold compound	silica vitreous	60676-86-0		13.081	mg	853016	438960				
				supplier	mold compound	epoxy resin	29690-82-2		0.613	mg	39974	20570				
				supplier	mold compound	Phenol resin	25068-38-6		0.537	mg	35018	18020				
				supplier	mold compound	Magnesium hydroxide	1309-42-8		0.613	mg	39974	20570				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.307	mg	20020	10302				
				supplier	mold compound	Zinc hydroxide	20427-58-1		0.153	mg	9977	5134				
				supplier	mold compound	carbon black	1333-86-4		0.031	mg	2022	1040				