



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 *	2018-06-11
Company Unique ID	NL 008751171B01		
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 *	MDG MD CHAMPION	Representative Title	MDG 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	<p>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.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
ST33HTPH2E32AHC2	3842*A8KCHC2	B	9996	2018-06-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	69.00	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
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable; if coating is used or other bulk termination	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	5x5x1.0	32	No lead	
Comment	Package : 42 VFQFPN 5X5x1.0 32L PITCH 0.5 7376875			

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-27th June 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 :						Mfr Item Name	3842*8KCHC2				6000001.0	999993.0
note : Substance present with less 0.001mg will not be declared in this document												
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	4.079	mg	supplier	die	Silicon (Si)	7440-21-3		3.914	mg	959549	56725
				supplier	metallization	Aluminium (Al)	7429-90-5		0.019	mg	4658	275
				supplier	metallization	Copper (Cu)	7440-50-8		0.066	mg	16180	957
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.023	mg	5639	333
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	245	14
				supplier	Passivation	Silicon Nitride	12033-89-5		0.013	mg	3187	188
				supplier	Passivation	Silicon Oxide	7631-86-9		0.043	mg	10542	623
LEADFRAME	M-011 Other inorganic materials	29.844	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		28.533	mg	956072	413522
				supplier	ALLOY	Iron (Fe)	7439-89-6		0.688	mg	23053	9971
				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.035	mg	1173	507
				supplier	ALLOY	Phosphorus (P)	7723-14-0		0.009	mg	302	130
				supplier	COATING	Nickel (Ni)	7440-02-0		0.565	mg	18932	8188
				supplier	COATING	Palladium (Pd)	7440-05-3		0.012	mg	402	174
				supplier	COATING	Gold (Au)	7440-57-5		0.002	mg	67	29
DIE ATTACH	M-011 Other inorganic materials	0.010	mg	supplier	GLUE	2-propionic acid methylester reaction product	Proprietary		0.001	mg	130000	19
				supplier	GLUE	Silver (Ag)	7440-22-4		0.008	mg	800000	116
				supplier	GLUE	Bis(α,α-dimethylbenzyl) peroxide	80-43-3		0.000	mg	30000	4
				supplier	GLUE	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.000	mg	30000	4
				supplier	GLUE	Additive	Proprietary		0.000	mg	10000	1
BONDING WIRE	M-011 Other inorganic materials	0.844	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.844	mg	1000000	12232
ENCAPSULATION	M-011 Other inorganic materials	34.091	mg	supplier	MOLDING COMPOUND	epoxy resin	Proprietary		1.750	mg	51334	25362
				supplier	MOLDING COMPOUND	silica vitreous	60676-86-0		29.219	mg	857094	423464
				supplier	MOLDING COMPOUND	Phenol resin	Proprietary		0.668	mg	19595	9681
				supplier	MOLDING COMPOUND	Magnesium hydroxide	1309-42-8		1.363	mg	39987	19757
				supplier	MOLDING COMPOUND	carbon black	1333-86-4		0.068	mg	1999	988
				supplier	MOLDING COMPOUND	Biphenyl epoxy resin	85954-11-6		0.682	mg	19994	9878
FINISHING	M-011 Other inorganic materials	0.132	mg	supplier	MOLDING COMPOUND	Zinc hydroxide	20427-58-1		0.341	mg	9997	4939
				supplier	COATING	Nickel (Ni)	7440-02-0		0.116	mg	878788	1681
				supplier	COATING	Palladium (Pd)	7440-05-3		0.007	mg	53030	101
				supplier	COATING	Gold (Au)	7440-57-5		0.009	mg	68182	130