



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 *	2018-09-14
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 *	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

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
	BNI2*A236AA6	A	SA1A	2018-09-14
Amount	UoM	Unit type	ST ECOPACK Grade	
21.3	mg	Each	ECOPACK® 3	
	Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony		

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	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	3x3x1	10	flat	
Comment	WQ VDFPN 3x3x1.0 10 PITCH 0.50; MDF valid for TSB572IQ2T			

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	BN12*AZ36AA6				5999999.0	1000049.0
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	1.002	mg	supplier	die	Silicon (Si)	7440-21-3		0.967	mg	965070	45399
				supplier	metallization	Aluminium (Al)	7429-90-5		0.003	mg	2994	141
				supplier	metallization	Copper (Cu)	7440-50-8		0.012	mg	11976	563
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.003	mg	2994	141
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	998	47
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	3992	188
				supplier	Passivation	Silicon Oxide	7631-86-9		0.012	mg	11976	563
Leadframe	M-004 Copper and its alloys	6.318	mg	supplier	Alloy	Copper (Cu)	7440-50-8		6.089	mg	963754	285869
				supplier	Alloy	Iron (Fe)	7439-89-6		0.147	mg	23267	6901
				supplier	Alloy	Zinc (Zn)	7440-66-6		0.008	mg	1266	376
				supplier	Alloy	Phosphorus (P)	7723-14-0		0.005	mg	791	235
				supplier	metallization	Silver (Ag)	7440-22-4		0.069	mg	10921	3239
Die attach	M-015 Other organic materials	0.140	mg	supplier	glue	Aluminium oxide	1344-28-1		0.069	mg	492857	3239
				supplier	glue	2-(2-Ethoxyethoxy)ethyl acetate	112-15-2		0.028	mg	200000	1315
				supplier	glue	Phenol, 4,4'-(1-methylethylidene)bis-, polymer	25036-25-3		0.028	mg	200000	1315
				supplier	glue	Reaction product: bisphenol-A-(epichlorhydrin)	25068-38-6		0.007	mg	50000	329
				supplier	glue	Dapsone	80-08-0		0.007	mg	50000	329
supplier	glue	3-Aminopropyltriethoxysilane	919-30-2		0.001	mg	7143	47				
Bonding wires	M-008 Precious metals	0.083	mg	supplier	wire	Gold (Au)	7440-57-5		0.083	mg	1000000	3897
Encapsulation	M-015 Other organic materials	12.570	mg	supplier	Molding compound	Epoxy resin	29690-82-2		0.308	mg	24503	14460
				supplier	Molding compound	Phenol resin	25068-38-6		0.308	mg	24503	14460
				supplier	Molding compound	Silica (Amorphous) A	60676-86-0		10.056	mg	800000	472113
				supplier	Molding compound	Silica (Amorphous) B	7631-86-9		1.885	mg	149960	88498
				supplier	Molding compound	Carbon black	1333-86-4		0.013	mg	1034	610
connections coating	M-011 Other inorganic materials	1.188	mg	supplier	solder	Tin (Sn)	7440-31-5		1.188	mg	1000000	55775