



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D * : Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-09-08
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
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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
	ANK9*3011AAAY	A	997G	2020-09-08
Amount	UoM	Unit type	ST ECOPACK Grade	
8	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	Package Size	Nbr of instances	Shape	
QFN	2 x 2	8	Flat	
Comment	B045 WDFPN 2X2X0.8 8 P 0.5 WET FLK; MDF is valid for TS3011IYQ3T			

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Directive 2015/863-March 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 : ELV directive : 2000/53/EC amended 2020/363_March 2020	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	true
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Exemption Id.	Description

QueryList : California Prop65 list, dated 3rd January 2020			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			true
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			false
Substance	amount in product (mg)	Application	ppm in product

QueryList : REACH-25th June 2020				
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
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update				
Query				Response
The Product does contain at least one of the substances listed in Chemical Control Act				false
Substance	Homogeneous Material impacted	Content in Homogeneous Material (mg)	Concentration in the material(%)	Application Purpose

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	ANK9*3011AAY		8.0		6000151.0	999671.0
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	0.152	mg	supplier	die	Silicon(Si)	7440-21-3		0.143	mg	940789	17875
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.002	mg	13158	250
				supplier	metallisation	Tungsten(W)	7440-33-7		0.002	mg	13158	250
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.001	mg	6579	125
				supplier	passivation	Silicon oxide	7631-86-9		0.004	mg	26316	500
				supplier	alloy	Copper (Cu)	7440-50-8		2.478	mg	988582	309750
Leadframe	M-004 Copper and its alloys	2.507	mg	supplier	alloy	Chromium (Cr)	7440-47-3		0.006	mg	2394	750
				supplier	alloy	Tin (Sn)	7440-31-5		0.006	mg	2394	750
				supplier	alloy	Zinc (Zn)	7440-66-6		0.006	mg	2394	750
				supplier	metallization	Silver (Ag)	7440-22-4		0.011	mg	4388	1375
				supplier	glue	Aluminium oxide	1344-28-1		0.068	mg	500000	8477
Die attach	M-015 Other organic materials	0.136	mg	supplier	glue	2-(2-Ethoxyethoxy)ethyl acetate	112-15-2		0.027	mg	200000	3391
				supplier	glue	Phenol, 4,4'-(1-methylethylene)bis-, polymer	25036-25-3		0.027	mg	200000	3391
				supplier	glue	Reaction product: bisphenol-A-(epichlorhydrin	25068-38-6		0.007	mg	48000	814
				supplier	glue	Dapsone	80-08-0		0.007	mg	48000	814
				supplier	glue	3-Aminopropyltriethoxysilane	919-30-2		0.001	mg	4000	68
Bonding wires	M-008 Precious metals	0.248	mg	supplier	wire	Gold (Au)	7440-57-5		0.248	mg	1000000	30958
Encapsulation	M-015 Other organic materials	4.489	mg	supplier	mold compound	Epoxy Resin	Proprietary		0.216	mg	48218	27056
				supplier	mold compound	Phenol Resin	Proprietary		0.100	mg	22180	12446
				supplier	mold compound	Silica (Amorphous)A	60676-86-0		3.840	mg	855346	479957
				supplier	mold compound	Silica (Amorphous)B	7631-86-9		0.216	mg	48218	27056
				supplier	mold compound	Metal Hydroxide	Proprietary		0.100	mg	22180	12446
connections coating	Solder	0.466	mg	supplier	mold compound	Carbon Black	1333-86-4		0.017	mg	3857	2165
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.466	mg	1000000	58257