



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 *	2020-04-16
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	<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
	ANK9*0393BF6	B	Z7GA-997G	2020-04-16
Amount	UoM	Unit type	ST ECOPACK Grade	
8.07	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		
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	2x2x0.8	8	flat	
Comment	B045 WDFPN 2X2X0.8 8 P 0.5 WET FLK; MDF is valid for LM2903YQ3T			

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 : REACH-16th January 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

Material Composition Declaration :						Mfr Item Name	ANK9*0393BF6				5999999.0	999877.0
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	M-011 Other inorganic materials	0.395	mg	supplier	die	Silicon (Si)	7440-21-3		0.385	mg	974684	47708
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	12658	620
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	5063	248
				supplier	Passivation	Silicon Oxide	7631-86-9		0.003	mg	7595	372
Leadframe	M-004 Copper and its alloys	2.503	mg	supplier	Alloy	Copper (Cu)	7440-50-8		2.474	mg	988414	306568
				supplier	Alloy	Chromium (Cr)	7440-47-3		0.006	mg	2397	743
				supplier	Alloy	Tin (Sn)	7440-31-5		0.006	mg	2397	743
				supplier	Alloy	Zinc (Zn)	7440-66-6		0.006	mg	2397	743
Die attach	M-015 Other organic materials	0.137	mg	supplier	Coating	Silver (Ag)	7440-22-4		0.011	mg	4395	1363
				supplier	Adhesive	Aluminium oxide	1344-28-1		0.068	mg	496350	8426
				supplier	Adhesive	2-(2-Ethoxyethoxy)ethyl acetate	112-15-2		0.027	mg	197080	3346
				supplier	Adhesive	Phenol, 4,4'-(1-methylethylidene)bis-, polyme	25036-25-3		0.027	mg	197080	3346
Bonding wires	M-008 Precious metals	0.247	mg	supplier	Adhesive	Reaction product: bisphenol-A-(epichlorhydrin	25068-38-6		0.007	mg	51095	867
				supplier	Adhesive	Dapsone	80-08-0		0.007	mg	51095	867
				supplier	Adhesive	3-Aminopropyltriethoxysilane	919-30-2		0.001	mg	7299	124
				supplier	wire	Gold (Au)	7440-57-5		0.247	mg	1000000	30607
Encapsulation	M-015 Other organic materials	4.322	mg	supplier	Molding compound	Epoxy Resin	Proprietary		0.216	mg	49977	26766
				supplier	Molding compound	Phenol Resin	Proprietary		0.099	mg	22906	12268
				supplier	Molding compound	Silica, vitreous	60676-86-0		3.675	mg	850301	455390
				supplier	Molding compound	Silica (Amorphous)B	7631-86-9		0.216	mg	49977	26766
connections coating	Solder	0.465	mg	supplier	Molding compound	Metal Hydroxide	Proprietary		0.099	mg	22906	12268
				supplier	Molding compound	Carbon Black	1333-86-4		0.017	mg	3933	2107
connections coating	Solder	0.465	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.465	mg	1000000	57621