



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 *	2020-09-30
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 product group Material Declaration 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
	CNG6*F174AC9	A	997G	2020-09-30
Amount	UoM	Unit type	ST ECOPACK Grade	
36	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
3	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	5 x 5	32	Flat	
Comment	A06C VFQFPN 5X5X1.0 32L WET FLK; MDF is valid for BLUENRG-232			

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				true
Substance	Homogeneous Material impacted	Content in Homogeneous Material (mg)	Concentration in the material(%)	Application Purpose

Responsible metals sourcing	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present is the component :	Gold, Tantalum, Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CNG6*F174AC9	36.2		6000105.0	1006589.0					
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	3.494	mg	supplier	die	Silicon(Si)	7440-21-3		3.258	mg	932456	90500				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.011	mg	3148	306				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.100	mg	28620	2778				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.032	mg	9159	889				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	286	28				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	286	28				
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.026	mg	7441	722				
				supplier	passivation	Silicon oxide	7631-86-9		0.065	mg	18603	1806				
				Leadframe	M-004 Copper and its alloys	10.628	mg	supplier	alloy	Copper (Cu)	7440-50-8		10.185	mg	958329	282917
								supplier	alloy	Chromium (Cr)	7440-47-3		0.028	mg	2635	778
supplier	alloy	Tin (Sn)	7440-31-5						0.026	mg	2446	722				
supplier	alloy	Zinc (Zn)	7440-66-6						0.021	mg	1976	583				
supplier	metallization	Silver (Ag)	7440-22-4						0.369	mg	34720	10250				
Die attach	M-015 Other organic materials	2.452	mg	supplier	glue	Silver (Ag)	7440-22-4		1.998	mg	815000	55510				
				supplier	glue	[Octahydro-4,7-methano-1H-indenedyl]bis(m	42594-17-2		0.147	mg	60000	4087				
				supplier	glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl met	7534-94-3		0.147	mg	60000	4087				
				supplier	glue	Isobornyl acrylate	5888-33-5		0.147	mg	60000	4087				
				supplier	glue	2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane	3388-04-3		0.012	mg	5000	341				
Bonding wires	M-008 Precious metals	0.482	mg	supplier	wire	Gold (Au)	7440-57-5		0.479	mg	992000	13292				
				supplier	wire	Platinum (Pt)	7440-06-4		0.003	mg	6000	80				
				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	2000	27				
Encapsulation	M-015 Other organic materials	17.020	mg	supplier	mold compound	Epoxy Resin	Proprietary		0.851	mg	50000	23638				
				supplier	mold compound	Phenol Resin	Proprietary		0.391	mg	23000	10874				
				supplier	mold compound	Silica (Amorphous)A	60676-86-0		14.467	mg	850000	401850				
				supplier	mold compound	Silica (Amorphous)B	7631-86-9		0.851	mg	50000	23638				
				supplier	mold compound	Metal Hydroxide	Proprietary		0.391	mg	23000	10874				
connections coating	Solder	2.160	mg	supplier	mold compound	Carbon Black	1333-86-4		0.068	mg	4000	1891				
				supplier	solder alloy	Tin (Sn)	7440-31-5		2.160	mg	1000000	60006				