

Materials Declaration Form

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

Supplier Information							
Company Name *	STMicroelectronics	Response Date *	2020-07-15				
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 *	Antonella Lanzafame 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.htm	ı					

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 Number Mfr Item Name Version Mfr Site Da								
VIPER27LN	9EJG*MV63BB6	А	Z8GA	2020-07-15					
	Amount	ST ECOPACK Grade							
	471	ECOPACK® 2							
	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) an Antimony oxide flame retardant (in each organic material)								

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
Not Applicable	Not Applicable	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		moradginoriiod

Package Designator	Package Size	Nbr of instances	Shape	
DIP	9.053.326.4	Pin		
Comment	JG PDIP 7 - MDIP .25			

QueryList: RoHS Directive 2011/65/EU-July 2011 Annex II amended by Directive 2015/863-March 2015							
	Query						
1 - Product(s) meets EU RoHS requirement w	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)							
3 - Product(s) meets EU RoHS requirements b	3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)						
4 - Product(s) does not meet EU RoHS require	4 - Product(s) does not meet EU RoHS requirements and is not under exemptions						
Exemption Id.	Exemption Id. Description						

QueryList: ELV directive: 2000/53/EC amended 2020/363_March 2020								
	Query Response							
1 - Product(s) meets EU ELV requirements wi	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)								
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 co	false						
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consun	true						
Substance	Substance amount in product (mg) Application						
Nickel	53						

QueryList: REACH-25th June 2020							
	Query			Response			
1 - Product(s) does not contain REACH Substa	ances Of Very High Concern above the limits per the def	inition within REACH		true			
CategoryLevel_Name	tegoryLevel_Name CategoryLevel_Threshold amount in product (mg) Application						
,							
2 - Product(s) does not contain REACH Sul REACH	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						
CategoryLevel_Name	I Categoryl evel Threshold	Amount in Embedded Article / Application - Article / Homogeneous Material (mg) Material		us 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	on: ss 0.001mg will not be declared in this document					Mfr Item Name	9	EJG*MV63BB6			6000000.0	1000000.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	4.949	mg	supplier	die	Silicon(Si)	7440-21-3		4.780	mg	965852	10149
				supplier	metallisation	Aluminium(AI)	7429-90-5		0.060	mg	12124	127
				supplier	metallisation	Gold(Au)	7440-57-5		0.005	mg	1010	11
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.025	mg	5052	53
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	404	4
				supplier	metallisation	Tungsten(W)	7440-33-7		0.007	mg	1414	15
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.019	mg	3839	40
				supplier	passivation	Silicon oxide	7631-86-9		0.042	mg	8487	89
				supplier	polymer coating	polyimide	proprietary		0.009	mg	1819	19
Leadframe	M-004 Copper and its alloys	150.102	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		145.519	mg	969467	308958
				supplier	alloy & coating	Iron(Fe)	7439-89-6		3.502	mg	23331	7435
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.126	mg	839	268
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.180	mg	1199	382
				supplier	alloy & coating	Silver (Ag)	7440-22-4		0.775	mg	5163	1645
Die attach	M-015 Other organic materials	5.428	mg	supplier	Substance Category	Silver (Ag)	7440-22-4		4.343	mg	800111	9221
				supplier	glue	2,6-Diglycidylphenyl allyl ether	13561-08-5		0.814	mg	149963	1728
				supplier	glue	1,4-bis (2,3-epoxypropoxy) butane	2425-79-8		0.108	mg	19897	229
				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.163	mg	30029	346
Bonding wires	M-008 Precious metals	0.170	mg	supplier	wire	Gold (Au)	7440-57-5		0.170	mg	1000000	361
Encapsulation	M-011 Other inorganic materials	305.981	mg	supplier	mold compound	Silica, vitreous	60676-86-0		266.225	mg	870070	565234
				supplier	mold compound	Epoxy resin	25068-38-6		30.521	mg	99748	64800
				supplier	mold compound	Phenol resin	29690-82-2		7.704	mg	25178	16357
				supplier	mold compound	Carbon Black	1333-86-4		1.531	mg	5004	3251
connections coating	Solder	4.370	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.370	mg	1000000	9278
		+	-	+	+				-			