



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 *	2017-06-08
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Antonella Lanzafame	Representative Title	AMG 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
VIPER011LSTR	CJW4*MV5WAB6	A	BO2A	2017-06-08
	Amount	UoM	Unit type	ST ECOPACK Grade
	81.00	mg	Each	ECOPACK® 2
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

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	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85x3.9x1.52	10	gull wing	
Comment	Package:W4 SSOP 10L 3.9 BODY 1 PITCH			

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

ELV directive : 2000/53/EC amended 2016/774 _May 2016	
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

Query : California Prop65 list, dated 27th January 2017			
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
Nickel	0.09	metallization	1148

QueryList : REACH-12th January 2017				
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	CIW4*MV5WAB6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	Other inorganic materials	2.840	mg	supplier	die	Silicon (Si)	7440-21-3		2.737	mg	963732	33790
				supplier	metallization	Aluminium (Al)	7429-90-5		0.035	mg	12324	432
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	352	12
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	352	12
				supplier	Passivation	Silicon Nitride	12033-89-5		0.011	mg	3873	136
				supplier	Passivation	Silicon Oxide	7631-86-9		0.030	mg	10563	370
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	352	12
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	352	12
				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	1408	49
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.019	mg	6690	235
Leadframe	Copper & its alloys	23.328	mg	supplier	alloy	Copper (Cu)	7440-50-8		22.655	mg	971151	279691
				supplier	alloy	Iron (Fe)	7439-89-6		0.533	mg	22848	6580
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.032	mg	1372	395
				supplier	alloy	Zinc (Zn)	7440-66-6		0.028	mg	1200	346
				supplier	metallization	Nickel (Ni)	7440-02-0		0.074	mg	3172	914
				supplier	metallization	Palladium (Pd)	7440-05-3		0.002	mg	86	25
				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	86	25
				supplier	metallization	Silver (Ag)	7440-22-4		0.002	mg	86	25
Die attach	Other Organic Materials	0.323	mg	supplier	glue	Silver (Ag)	7440-22-4		0.284	mg	879257	3506
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.016	mg	49536	198
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.016	mg	49536	198
				supplier	glue	Acrylate polymer	87320-05-6		0.007	mg	21672	86
Bonding wires	Other inorganic materials	0.074	mg	supplier	wire	Copper (Cu)	7440-50-8		0.074	mg	1000000	914
Encapsulation	Other Organic Materials	54.435	mg	supplier	mold compound	Silica, vitreous	60676-86-0		47.140	mg	865987	581975
				supplier	mold compound	Epoxy Resin	Proprietary		4.083	mg	75007	50407
				supplier	mold compound	Phenol Resin	Proprietary		2.722	mg	50005	33605
				supplier	mold compound	Carbon black	1333-86-4		0.272	mg	4997	3358
				supplier	mold compound	Bismuth compound	7440-69-9		0.218	mg	4005	2691