



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 *	2019-01-10
Contact Name *	Refer to Supplier Comment section		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.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 omprehensive 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
LDK120C28R	RVW8*V797AA5	A	ZS1A	2019-01-10
Amount	UoM	Unit type	ST ECOPACK Grade	
6.00	mg	Each	ECOPACK® 2	

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	
ting is used or other bulk terminat	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	2x1.26x0.93	5	gull wing	
Comment	Package: W8 SOT 323 5LDS			

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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description

ELV exemption number	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	false
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Exemption Id.	Description

QueryList : REACH-27th Jun 2018				
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	RVW8*V797AA5					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	0.288	mg	supplier	die	Silicon (Si)	7440-21-3		0.268	mg	930556	44667
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	13889	667
				supplier	metallization	Tungsten (W)	7440-33-7		0.003	mg	10417	500
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	3472	167
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	24306	1167
				supplier	polymer die coating	PIX1 Polyimide	108-65-6		0.001	mg	3472	167
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.004	mg	13889	667
Leadframe	Copper & its alloys	1.394	mg	supplier	Alloy	Copper (Cu)	7440-50-8		1.344	mg	964132	224000
				supplier	Alloy	Iron (Fe)	7439-89-6		0.031	mg	22238	5167
				supplier	Alloy	Zinc (Zn)	7440-66-6		0.002	mg	1435	333
				supplier	metallization	Nickel (Ni)	7440-02-0		0.016	mg	11478	2667
				supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	717	167
Die attach	Other Organic Materials	0.052	mg	supplier	glue	Silver (Ag)	7440-22-4		0.041	mg	788462	6833
				supplier	glue	Carbocyclic Acrylates	proprietary		0.005	mg	96154	833
				supplier	glue	Bismaleimide resin	35325-39-4		0.002	mg	38462	333
				supplier	glue	2-preponoic acid, 2-methyl	68586-19-6		0.002	mg	38462	333
				supplier	glue	Additive	proprietary		0.002	mg	38462	333
Bonding wires	Other inorganic materials	0.017	mg	supplier	wire	Copper (Cu)	7440-50-8		0.017	mg	1000000	2833
Encapsulation	Other Organic Materials	4.249	mg	supplier	mold compound	Epoxy Resin-1	Proprietary		0.127	mg	29889	21167
				supplier	mold compound	Epoxy Resin-2	25068-38-6		0.127	mg	29889	21167
				supplier	mold compound	Phenol resin	29690-82-2		0.191	mg	44952	31833
				supplier	mold compound	Silica	60676-86-0		3.711	mg	873382	618500
				supplier	mold compound	Carbon Black	1333-86-4		0.008	mg	1883	1333
				supplier	mold compound	Others	-		0.085	mg	20005	14167