



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-09-13
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
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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
	KDV2*U115FB6	A	64BA	2020-09-13
	Amount	UoM	Unit type	ST ECOPACK Grade
	5600	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
Not Applicable	Not Applicable	.		
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	
DSO	20 x 10.7	15	Gull wing	
Comment	V2 MULTIWATT 15L SPLIT VERT.; MDF is valid for TDA7296			

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	false
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)	true
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : ELV directive : 2000/53/EC amended 2020/363_March 2020	
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
8e	8e - Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

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			false
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			true
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.07	die	13
Lead	5.83	soft solder	1041
Antimony trioxide	22.49	encapsulation	4016

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				false
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	5.83	Soft solder	1041
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				false
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	5.829	Soft solder	974912

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
Bromine	Encapsulation	0.939	0.08%	

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	KDV2*U115FB6	5600.0		6000000.0	1000001.0	
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	14.264	mg	supplier	die	Silicon(Si)	7440-21-3		13.879	mg	973009	2478
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.086	mg	6029	15
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.008	mg	561	1
				supplier	metallisation	Copper(Cu)	7440-50-8		0.001	mg	70	0
				supplier	metallisation	Gold(Au)	7440-57-5		0.021	mg	1472	4
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.071	mg	4978	13
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.078	mg	5468	14
				supplier	passivation	Silicon oxide	7631-86-9		0.120	mg	8413	21
				supplier	alloy	Copper(Cu)	7440-50-8		4426.865	mg	998664	790512
				supplier	alloy	Iron phosphide	26508-33-8		3.723	mg	840	665
Leadframe	M-004 Copper and its alloys	4432.788	mg	supplier	alloy	Iron(Fe)	7439-89-6		2.039	mg	460	364
				supplier	metallization	Silver (Ag)	7440-22-4		0.161	mg	36	29
				SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	5.829	mg	974912	1041
				supplier	solder	Silver(Ag)	7440-22-4		0.090	mg	15053	16
Soft solder	Solder	5.979	mg	supplier	solder	Tin(Sn)	7440-31-5		0.060	mg	10035	11
				supplier	wire	Copper(Cu)	7440-50-8		0.654	mg	1000000	117
Bonding wires	M-004 Copper and its alloys	0.654	mg	supplier	wire	Copper(Cu)	7440-50-8		0.654	mg	1000000	117
				supplier	mold compound	Silica vitreous	60676-86-0		806.159	mg	717000	143957
Encapsulation	M-015 Other organic materials	1124.350	mg	supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		191.140	mg	170000	34132
				supplier	mold compound	Phenol resin	9003-35-4		80.953	mg	72000	14456
				supplier	mold compound	Brominated epoxy resin	40039-93-8		16.865	mg	15000	3012
				supplier	mold compound	Antimony trioxide	1309-64-4		22.487	mg	20000	4016
				supplier	mold compound	Bismuth (Bi)	7440-69-9		3.373	mg	3000	602
				supplier	mold compound	Carbon black	1333-86-4		3.373	mg	3000	602
				supplier	solder alloy	Tin (Sn)	7440-31-5		21.970	mg	1000000	3923
connections coating	Solder	21.970	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		21.970	mg	1000000	3923