



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D  <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2020-02-19
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	Floriana SAN BIAGIO	<b>Representative Title</b>	AMS MD CHAMPION
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

Legal Statement	
<b>Supplier Acceptance *</b>	true
<b>Legal Declaration *</b>	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
	DCDS*M6LACCN	A	9992-ZS1A	2020-02-19
	Amount	UoM	Unit type	ST ECOPACK Grade
	23.7	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
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	0	

Package Designator	Size	Nbr of instances	Shape	
DSO	3 x 3	8	gull wing	
Comment	E3 MSOP/TSSOP 8 BODY3.00 PITCH0.65; MDF is valid for STCN75DS2F			

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 2017/2096 _November 2017	
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			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	0.10	Leadframe	4214

QueryList : REACH-16th January 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				NO
Substance	Homogeneous Material impacted	Content in Homogeneous Material (mg)	Concentration in the material(%)	Application Purpose

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	DCDS*MG6LACCN				5000010.0	1001844.0				
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	1.233	mg	supplier	die	Silicon(Si)	7440-21-3		1.194	mg	968370	50380				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.008	mg	6488	338				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.004	mg	3244	169				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	811	42				
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.004	mg	3244	169				
				supplier	passivation	Silicon oxide	7631-86-9		0.022	mg	17843	928				
Leadframe	M-004 Copper and its alloys	9.986	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		9.658	mg	967164	407511				
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.100	mg	10014	4219				
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.210	mg	21030	8861				
				supplier	alloy & coating	Phosphorus metal	7723-14-0		0.001	mg	100	42				
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.005	mg	501	211				
				supplier	alloy & coating	Palladium(Pd)	7440-05-3		0.010	mg	1001	422				
Die attach	M-015 Other organic materials	0.358	mg	supplier	alloy & coating	Gold(Au)	7440-57-5		0.002	mg	200	84				
				supplier	glue	Silver (Ag)	7440-22-4		0.304	mg	850000	12829				
				supplier	glue	Carboyclic acrylate	Proprietary		0.036	mg	100000	1509				
				supplier	glue	2-Propenoic acid, 2-methyl-, 2-[(2,3,3a,4,7,7a)h]hexahydro-1H-indeno[1,2-b]pyridine-5-carboxylic acid	68586-19-6		0.016	mg	45000	679				
				supplier	glue	2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane	3388-04-3		0.002	mg	5000	75				
				supplier	wire	Gold (Au)	7440-57-5		0.290	mg	1000000	12236				
Bonding wires	M-008 Precious metals	0.290	mg	supplier	wire	Gold (Au)	7440-57-5		0.290	mg	1000000	12236				
				Encapsulation	M-011 Other inorganic materials	11.877	mg	supplier	mold compound	Solid Epoxy Resin-1 (0.1-11%)	Proprietary		0.238	mg	20000	10023
								supplier	mold compound	Solid Epoxy Resin-2 (0.1-11%)	Proprietary		0.238	mg	20000	10023
								supplier	mold compound	Phenol resin (2-12%)	Proprietary		0.475	mg	40000	20046
								supplier	mold compound	Amorphous Silica (85-95%)	60676-86-0		10.571	mg	890000	446014
								supplier	mold compound	Carbon Black (<1%)	1333-86-4		0.059	mg	5000	2506
supplier	mold compound	Crystalline silica (less than 5%)	14808-60-7		0.297	mg	25000	12528								