



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-07-27
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	ADG 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

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

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 Name	Version	Mfr Site	Date
ESDALC6V1P6	801G*BLC6V14	A	ZS1A	2018-07-27
	Amount	UoM	Unit type	ST ECOPACK Grade
	3.00	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
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	1.66 x 1.65 x 0.57	6	flat	
Comment	Package: SOT 666 EXPAD			

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 25th May 2018			
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	0.002	die	667

QueryList : REACH-15th January 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
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	801G*BLC6V14					
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	0.128	mg	supplier	die	Silicon (Si)	7440-21-3		0.123	mg	963195	41000
				supplier	metallization	Aluminium (Al)	7429-90-5		0.0002	mg	1566	68
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	7831	333
				supplier	Passivation	Silicon Oxide	7631-86-9		0.001	mg	7831	333
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.0001	mg	783	33
				supplier	back side metallization	Gold (Au)	7440-57-5		0.0004	mg	3132	133
Leadframe	Copper & its alloys	0.901	mg	supplier	back side metallization	Nickel (Ni)	7440-02-0		0.002	mg	15662	667
				supplier	alloy	Copper (Cu)	7440-50-8		0.871	mg	966704	290333
				supplier	alloy	Iron (Fe)	7439-89-6		0.020	mg	22198	6667
				supplier	alloy	Zinc (Zn)	7440-66-6		0.001	mg	1110	333
Die attach	Other Organic Materials	0.030	mg	supplier	metallization	Silver (Ag)	7440-22-4		0.009	mg	9988	3000
				supplier	glue	Silver (Ag)	7440-22-4		0.022	mg	733333	7333
				supplier	glue	Epoxy Resin	9003-36-5		0.006	mg	200000	2000
				supplier	glue	t-Butyl phenyl glycidyl ether	3101-60-8		0.002	mg	66667	667
Bonding wire	Other inorganic materials	0.053	mg	supplier	wire	Gold (Au)	7440-50-8		0.053	mg	1000000	17767
Encapsulation	Other Organic Materials	1.734	mg	supplier	mold compound	Silica Fused	60676-86-0		1.561	mg	900231	520333
				supplier	mold compound	Epoxy Resin	25068-38-6		0.087	mg	50173	29000
				supplier	mold compound	Phenol Resin	29690-82-2		0.017	mg	9804	5667
				supplier	mold compound	Metal Hydroxide	21645-51-2		0.017	mg	9804	5667
				supplier	mold compound	Organosilicon compound	Proprietary		0.043	mg	24798	14333
				supplier	mold compound	Carbon Black	1333-86-4		0.009	mg	5190	3000
Connection Coating	Other inorganic materials	0.154	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.154	mg	1000000	51333