



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 *	2017-03-02
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
L6494LDTR	1AK7*U1K9AAA	A	Z7GA	2017-03-02
	Amount	UoM	Unit type	ST ECOPACK Grade
	130.00	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	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	3,9,8.65,1.37	14	gull wing	
Comment				

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

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 :						Mfr Item Name	1AK7*U1K9AAA					
note : Substance present with less 0.001mg will not be declared in this document												
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies (choose)	Other inorganic materials	3.292	mg	supplier	die	Silicon (Si)	7440-21-3		3.185	mg	967497	24500
					metallization	Aluminium (Al)	7429-90-5		0.015	mg	4557	115
					metallization	Tungsten (W)	7440-33-7		0.019	mg	5772	146
					Passivation	Silicon Nitride	12033-89-5		0.005	mg	1519	38
					Passivation	Silicon Oxide	7631-86-9		0.051	mg	15492	392
					back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	608	15
					back side metallization	Gold (Au)	7440-57-5		0.005	mg	1519	38
					back side metallization	Nickel (Ni)	7440-02-0		0.009	mg	2734	69
					back side metallization	Vanadium (V)	7440-62-2		0.001	mg	304	8
					Leadframe	Copper & its alloys	41.338	mg	supplier	Iron	Iron	7439-89-6
Alloy	Phosphrus	7723-14-0		0.030						mg	726	231
Alloy	Zinc	7440-66-6		0.047						mg	1137	362
Alloy	Copper	7440-50-8		37.751						mg	913228	290392
Alloy	Lead	7439-92-1		0.002						mg	48	15
coating	Silver	7440-22-4		2.604						mg	62993	20031
Die Attach	Other Organic Materials	0.079	mg	supplier	Glue	Silver	7440-22-4		0.064	mg	810127	492
					Glue	(Octahydro-4,7-methano-1 H-indenediyl)bis(m	42594-17-2		0.005	mg	63291	38
					Glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl met	7534-94-3		0.005	mg	63291	38
					Glue	Isobornyl acrylate	5888-33-5		0.005	mg	63291	38
Bonding wire	Other inorganic materials	0.343	mg	supplier	Bonding wire	Copper	7440-50-8		0.343	mg	1000000	2638
Encapsulation	Other Organic Materials	81.274	mg	supplier	Molding compound	Epoxy Resin A	Proprietary		2.032	mg	25002	15631
					Molding compound	Epoxy Resin B	Proprietary		2.032	mg	25002	15631
					Molding compound	Phenol Resin	29690-82-2		2.032	mg	25002	15631
					Molding compound	Carbon Black	133-86-4		0.081	mg	997	623
					Molding compound	Silica Fused	60676-86-0		75.097	mg	923998	577669
Finishing	Other inorganic materials	3.677	mg	supplier	Plating	Sn	7440-31-5		3.677	mg	1000000	28285