



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 *	2017-09-06
Contact Name *	Refer to Supplier Comment section		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

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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 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
DSL05-016SC6	CDWB*CWU016A	A	ZS1A	2017-09-06
Amount		UoM	Unit type	ST ECOPACK Grade
16.00		mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SOT	2.9 - 1.625 - 1.175	6	gull wing	
Comment	Package: SOT 23 - 6L			

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

Query : California Prop65 list, dated 27th January 2017			
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	die backside metal-lead metal	6188

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	CDWB*CWU016A					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	Other inorganic materials	0.585	mg	supplier	die	Silicon (Si)	7440-21-3		0.483	mg	825641	30188
				supplier	metallization	Aluminium (Al)	7429-90-5		0.084	mg	143590	5250
				supplier	Passivation	Silicon Oxide	7631-86-9		0.008	mg	13675	500
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1709	63
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	6838	250
				supplier	polymer die coating	Durimide	proprietary		0.005	mg	8547	313
Leadframe	Copper and its alloy	8.210	mg	supplier	alloy	Copper (Cu)	7440-50-8		7.909	mg	963337	494313
				supplier	alloy	Iron (Fe)	7439-89-6		0.185	mg	22533	11563
				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	244	125
				supplier	alloy	Zinc (Zn)	7440-66-6		0.010	mg	1218	625
				supplier	metallization	Nickel (Ni)	7440-02-0		0.095	mg	11571	5938
				supplier	metallization	Palladium (Pd)	7440-05-3		0.008	mg	975	500
Die attach	Other inorganic materials	0.043	mg	supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	122	63
				supplier	glue	Silver (Ag)	7440-22-4		0.035	mg	813953	2181
				supplier	glue	Carbocyclic Acrylates	proprietary		0.005	mg	116279	313
				supplier	glue	Bismaleimide resin	35325-39-4		0.001	mg	23256	63
				supplier	glue	2-preponoic acid 2-methyl	68586-19-6		0.001	mg	23256	63
				supplier	glue	Additive	proprietary		0.001	mg	23256	63
Die attach 2	Other inorganic materials	0.037	mg	supplier	glue	Silver (Ag)	7440-22-4		0.025	mg	675676	1563
				supplier	glue	2-(2-Ethoxyethoxy)ethyl acetate	112-15-2		0.002	mg	54054	125
				supplier	glue	Proylene carbonate	108-32-7		0.002	mg	54054	125
				supplier	glue	3,3-Diamino diphenyl sulfone	599-61-1		0.002	mg	54054	125
				supplier	glue	Urethane acrylate oligomer	Proprietary		0.002	mg	54054	125
				supplier	glue	Rubber modified epoxy	Proprietary		0.002	mg	54054	125
Bonding wires	Other inorganic materials	0.172	mg	supplier	glue	Epoxy resin	25068-38-6		0.002	mg	54054	125
				supplier	wires	Copper (Cu)	7440-50-8		0.172	mg	1000000	10750
Encapsulation	Other Organic Materials	6.953	mg	supplier	mold compound	Epoxy Resin	25068-38-6		0.417	mg	59974	26063
				supplier	mold compound	Phenol resin	29690-82-2		0.312	mg	44873	19500
				supplier	mold compound	Silica	60676-86-0		6.210	mg	893140	388125
				supplier	mold compound	Carbon Black	1333-86-4		0.014	mg	2013	875