



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 *	2017-10-27
Contact Name *	Refer to "Supplier Comment" section	Contact Title	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	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/internet/com/support/online_tech_support.jsp		

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
	DZDS*S6LAETG	A	ZS1A	2017-10-27
Amount	UoM	Unit type	ST ECOPACK Grade	
23.71	mg	Each	ECOPACK® 3	

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 ; if coating is used	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	3x3x1	8	J bend	
Comment	Package:E3 MSOP/TSSOP 8 BODY3.00 PITCH0.65; MDF valid for STM6905TGEDS6F			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

QueryList : REACH-7th July 2017				
Query				Response
The product 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	DZDS*56LAETG					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	0.922	mg	supplier	die	Silicon (Si)	7440-21-3		0.767	mg	973350	32356
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	5076	169
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	2538	84
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1269	42
Die				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2538	84
Die				supplier	Passivation	Silicon Oxide	7631-86-9		0.012	mg	15228	506
Leadframe	Other inorganic materials	10.196	mg	supplier	alloy	Copper (Cu)	7440-50-8		9.822	mg	963319	414343
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.23	mg	22558	9703
Leadframe				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	196	84
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.013	mg	1275	548
Leadframe	Nickel (Ni)			supplier	metallization	Iron (Fe)	7439-89-6		0.117	mg	11475	4936
Leadframe	Precious metals			supplier	metallization	Palladium (Pd)	7440-05-3		0.01	mg	981	422
Leadframe	Precious metals			supplier	metallization	Iron Phosphide (Fe ₂ P)	1310-43-6		0.002	mg	196	84
Die Attach	Other Organic Materials	0.384	mg	supplier	glue	Silver (Ag)	7440-22-4		0.307	mg	799479	12951
Die Attach				supplier	glue	Epoxy resin	29690-82-2		0.058	mg	151042	2447
Die Attach				supplier	glue	Aromatic Amine	Proprietary		0.019	mg	49479	802
Bonding wire	Precious metals	0.313	mg	supplier	wire	Gold (Au)	7440-57-5		0.313	mg	1000000	5611
encapsulation	Other Organic Materials	12.82	mg	supplier	mold compound	Silica Fused	60676-86-0		11.244	mg	877067	281080
encapsulation				supplier	mold compound	Epoxy Resin	Proprietary		0.641	mg	50000	15735
encapsulation				supplier	mold compound	Epoxy, Cresol Novolac	29690-82-2		0.256	mg	19969	15271
encapsulation				supplier	mold compound	Phenol Resin	25068-38-6		0.641	mg	50000	8732
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.038	mg	2964	675