



## 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>	2017-12-19
<b>Company Unique ID</b>	NL 008751171801		
<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>	AMG 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**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
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**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
	9BYP*UAR6ABA	A	ZY1A	2017-12-19
Amount	UoM	Unit type	ST ECOPACK Grade	
78.5	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	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.4x4.4x0.9	20	gull wing	
Comment	Package: YP HTSSOP 20 4.4 PITCH 0.65 EXPAD; MDF valid for IPS4260L			

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-7th July 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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	9BYP*UARGABA				6000000.0	999960.0
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	4.513	mg	supplier	die	Silicon (Si)	7440-21-3		4.101	mg	908708	52242
				supplier	metallization	Aluminium (Al)	7429-90-5		0.010	mg	2216	127
				supplier	metallization	Copper (Cu)	7440-50-8		0.252	mg	55839	3210
				supplier	passivation	Nickel (Ni)	7440-02-0		0.031	mg	6869	395
				supplier	metallization	Platinum (Pt)	7440-06-4		0.018	mg	3988	229
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	665	38
				supplier	metallization	Tungsten (W)	7440-33-7		0.014	mg	3102	178
				supplier	Passivation	Silicon Nitride	12033-89-5		0.008	mg	1773	102
				supplier	Passivation	Silicon Oxide	7631-86-9		0.055	mg	12187	701
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	443	25
				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1329	76
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.012	mg	2659	153
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	222	13
				Leadframe	M-004 Copper and its alloys	34.583	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.822	mg	23769	10471
supplier	alloy	Zinc (Zn)	7440-66-6						0.041	mg	1186	522
supplier	alloy	Metallic Phosphorous (P)	7723-14-0						0.010	mg	289	127
supplier	metallization	Silver (Ag)	7440-22-4						0.328	mg	9484	4178
supplier	metallization	Silver(Ag)	7440-22-4						1.053	mg	760838	13414
Die attach	M-015 Other organic materials	1.384	mg	supplier	glue	Reaction product: bisphenol-F-(epichlorhydrin)	9003-36-5		0.097	mg	70087	1236
				supplier	glue	Fatty acids, C18-unsatd., dimers, polymers with	68475-94-5		0.055	mg	39740	701
				supplier	glue	.gamma. Butyrolactone	96-48-0		0.055	mg	39740	701
				supplier	glue	Polyoxyalkylene amine	9046-10-0		0.055	mg	39740	701
				supplier	glue	Epoxy Resin	29690-82-2		0.055	mg	39740	701
				supplier	glue	Epoxy Resin Modifier	Proprietary		0.007	mg	5058	89
				supplier	glue	Substituted Silane	Proprietary		0.007	mg	5058	89
				supplier	wire	Copper (Cu)	7440-50-8		0.738	mg	1000000	9401
Encapsulation	M-015 Other organic materials	35.331	mg	supplier	mold compound	Epoxy Resin	29690-82-2		3.003	mg	84996	38255
				supplier	mold compound	Phenol Resin	205830-20-2		1.413	mg	39993	18000
				supplier	mold compound	Silica Amorphous A	60676-86-0		27.912	mg	790014	355567
				supplier	mold compound	Silica Amorphous B	7631-86-9		2.826	mg	79986	36000
				supplier	mold compound	Carbon Black	1333-86-4		0.177	mg	5010	2255
connections coating	M-011 Other inorganic materials	1.948	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.948	mg	1000000	24815