



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>27/1/2017</b>
<b>Contact Name *</b>	Refer to Supplier Comment section		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		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>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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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
	HYWY*UY25BBY	A	ZS1A	27/1/2017
Amount	UoM	Unit type	ST ECOPACK Grade	
16.375	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	
ating is used or other bulk terminati	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	2.8x2.6x0.9	5	J bend	
Comment	Package: WY SOT 23-5; MDF valid for TSX711IYLT			

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	HYWY*UY25BBY					
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	0.972	mg	supplier	die	Silicon (Si)	7440-21-3		0.939	mg	966049	57344
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1029	61
				supplier	Passivation	Silicon Nitride	12033-89-5		0.003	mg	3086	183
				supplier	Passivation	Silicon Oxide	7631-86-9		0.018	mg	18519	1099
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.011	mg	11317	672
Leadframe	Copper & its alloys	7.086	mg	supplier	alloy	Copper (Cu)	7440-50-8		6.826	mg	963308	416855
				supplier	alloy	Iron (Fe)	7439-89-6		0.159	mg	22439	9710
				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	282	122
				supplier	alloy	Zinc (Zn)	7440-66-6		0.009	mg	1270	550
				supplier	metallization	Nickel (Ni)	7440-02-0		0.082	mg	11572	5008
				supplier	metallization	Palladium (Pd)	7440-05-3		0.007	mg	988	427
				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	141	61
Die attach	Other Organic Materials	0.069	mg	supplier	glue	Silver (Ag)	7440-22-4		0.047	mg	681159	2870
				supplier	glue	methylene diacrylate	42594-17-2		0.018	mg	260870	1099
				supplier	glue	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.002	mg	28986	122
				supplier	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.002	mg	28986	122
Bonding wires	Precious metals	0.148	mg	supplier	wire	Gold (Au)	7440-57-5		0.148	mg	1000000	9038
Encapsulation	Other Organic Materials	8.101	mg	supplier	mold compound	Silica, vitreous	60676-86-0		6.915	mg	853598	422290
				supplier	mold compound	phenolic resin	29690-82-2		0.282	mg	34811	17221
				supplier	mold compound	epoxy resin	25068-38-6		0.323	mg	39872	19725
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.161	mg	19874	9832
				supplier	mold compound	carbon black	1333-86-4		0.016	mg	1975	977
				supplier	mold compound	Zinc hydroxide	20427-58-1		0.081	mg	9999	4947
				supplier	mold compound	Magnesium hydroxide	1309-42-8		0.323	mg	39872	19725