



## 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  *: Required Field

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2016-04-07
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	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 Materials Declaration 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/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</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
	HYWY*UY25BBA	A	ZS1A	2016-04-07
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	
Not Applicable ; if coating is used o	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	2.9x 1.6x 1.05	5	gull wing	
Comment	Package: WY SOT 23-5; MDF valid for TSX711ILT			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-17th December 2015				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	HYWY*UY25BBA					
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	1.059	mg	supplier	die	Silicon (Si)	7440-21-3		1.026	mg	968839	62656
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	944	61
Die				supplier	Passivation	Silicon Nitride	12033-89-5		0.003	mg	2833	183
Die				supplier	Passivation	Silicon Oxide	7631-86-9		0.018	mg	16997	1099
Die				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.011	mg	10387	672
Leadframe	Other inorganic materials	7.008	mg	supplier	alloy	Copper (Cu)	7440-50-8		6.75	mg	963185	412214
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.158	mg	22546	9649
Leadframe				supplier	alloy	Phosphorus (P)	7723-14-0		0.002	mg	285	122
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.009	mg	1284	550
Leadframe	Nickel (Ni)			supplier	metallization	Nickel (Ni)	7440-02-0		0.081	mg	11558	4947
Leadframe	Precious metals			supplier	metallization	Iron (Fe)	7439-89-6		0.007	mg	999	427
Leadframe	Precious metals			supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	143	61
Die Attach	Other Organic Materials	0.068	mg	supplier	glue	Iron Phosphide (Fe2P)	1310-43-6		0.02	mg	294118	1221
Die Attach				supplier	glue	Diethylene glycol monoethyl ether acetate	112-15-2		0.027	mg	397059	1649
Die Attach				supplier	glue	Epoxy resin	25068-38-6		0.005	mg	73529	305
Die Attach				supplier	glue	Epoxy resin	Proprietary		0.014	mg	205882	855
Die Attach				supplier	glue	Aromatic amine	Proprietary		0.002	mg	29412	122
Bonding wire	Precious metals	0.146	mg	supplier	wire	Gold (Au)	7440-57-5		0.146	mg	1000000	8916
encapsulation	Other Organic Materials	8.095	mg	supplier	mold compound	Epoxy Resin-1	Proprietary		0.243	mg	30019	14840
encapsulation				supplier	mold compound	Epoxy Resin-2	Proprietary		0.243	mg	30019	14840
encapsulation				supplier	mold compound	Phenol resin	Proprietary		0.365	mg	45090	22290
encapsulation				supplier	mold compound	Silica	60676-86-0		7.065	mg	872761	431450
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.017	mg	2100	1038
encapsulation				supplier	mold compound	Others	Proprietary		0.162	mg	20012	9893