



## 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>	2015-07-23
<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>	Emilio Castelli	<b>Representative Title</b>	APG 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/online_tech_support.html">http://www.st.com/web/en/support/online_tech_support.html</a>		

**Uncertainty Statement**


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Legal Statement			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
FDA801B-VYT	H8VY*UR50BB1	A	MU1A	2015-07-23
Amount	UoM	Unit type	ST ECOPACK Grade	
263.00	mg	Each	ECOPACK® 2	

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	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10x10x1.4	64	flat	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
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
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-16th June 2014				
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	H8VY*URS0BB1					
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	23.969	mg	supplier	die	Silicon (Si)	7440-21-3		21.383	mg	892111	81304
Die				supplier	metallization	Copper (Cu)	7440-50-8		1.456	mg	60745	5536
Die				supplier	metallization	Tantalum (Ta)	7440-25-7		0.357	mg	14894	1357
Die				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	83	8
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	83	8
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.068	mg	2837	259
Die				supplier	metallization	Platinum (Pt)	7440-06-4		0.091	mg	3797	346
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.232	mg	9679	882
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.012	mg	501	46
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.033	mg	1377	125
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.094	mg	3922	357
Die				supplier	back side metallization	Vanadium (V)	7440-62-2		0.007	mg	292	27
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.232	mg	9679	882
Leadframe	Copper & its alloys	82.443	mg	supplier	alloy	Copper (Cu)	7440-50-8		80.062	mg	971119	304418
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		1.883	mg	22840	7160
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.113	mg	1371	430
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.099	mg	1201	376
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.266	mg	3226	1011
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.011	mg	133	42
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.009	mg	109	34
Die attach		4.667	mg	supplier	Glue	Bismaleimide resin	Proprietary		0.140	mg	29998	532
Die attach				supplier	Glue	Isobornyl Methacrylate	7534-94-3		0.350	mg	74995	1331
Die attach				supplier	Glue	Silver (Ag)	7440-22-4		4.177	mg	895007	15882
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		3.772	mg	1000000	14342
encapsulation		148.091	mg	supplier	mold compound	Epoxy Resin	Proprietary		10.836	mg	73171	41202
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		10.836	mg	73171	41202
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		124.831	mg	842934	474643
encapsulation				supplier	mold compound	Quartz	14808-60-7		0.433	mg	2924	1646
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		0.722	mg	4875	2745
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.433	mg	2924	1646