



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 *	2017-07-24
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 *	Rossana Bonaccorso	Representative Title	ADG 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/web/en/support/support.html		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	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
STL110N4F7AG	BSY5*OS437A2	A	SH1A	2017-07-24
	Amount	UoM	Unit type	ST ECOPACK Grade
	100.00	mg	Each	ECOPACK® 2

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	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	6, 5, 1	8	pin	
Comment	Package: PowerFLAT 5x6 WF			

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	false
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)	true
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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-12th January 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	BSY5*OS437A2					
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	0.752	mg	supplier	die	Silicon (Si)	7440-21-3		0.664	mg	882979	6640
				supplier	metallization	Aluminium (Al)	7429-90-5		0.051	mg	67819	510
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.014	mg	18617	140
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1330	10
				supplier	metallization	Nickel (Ni)	7440-02-0		0.015	mg	19947	150
				supplier	metallization	Vanadium (V)	7440-62-2		0.001	mg	1330	10
				supplier	metallization	Silver (Ag)	7440-22-4		0.006	mg	7978	60
				supplier	alloy	Copper (Cu)	7440-50-8		42.304	mg	952600	423040
Leadframe	Copper & its alloys	44.409	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.995	mg	22405	9950
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.06	mg	1351	600
				supplier	alloy	Zinc (Zn)	7440-66-6		0.052	mg	1171	520
				supplier	metallization	Silver (Ag)	7440-22-4		0.998	mg	22473	9980
				supplier	alloy	Copper (Cu)	7440-50-8		42.304	mg	952600	423040
Soft solder	Solder	5.745	mg	JIG-R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	5.486	mg	954917	54860
				supplier	solder	Silver (Ag)	7440-22-4		0.144	mg	25065	1440
				supplier	solder	Tin (Sn)	7440-31-5		0.115	mg	20018	1150
Bonding wire & Clip	Precious metals	7.863		supplier	wire	Gold (Au)	7440-57-5		0.058	mg	7376	580
				supplier	clip	Copper (Cu)	7440-50-8		7.805	mg	992624	78050
Encapsulation	Other inorganic materials	41.075	mg	supplier	mold compound	Silica, vitreous	60676-86-0		32.243	mg	784979	322430
				supplier	mold compound	epoxy resin	25068-38-6		5.34	mg	130006	53400
				supplier	mold compound	phenol resin	9003-35-4		2.465	mg	60012	24650
				supplier	mold compound	metal hydroxide	21645-51-2		0.822	mg	20012	8220
				supplier	mold compound	Carbon black	1333-86-4		0.205	mg	4991	2050
Connections coating	Solder	0.156	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.156	mg	1000000	1560