



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-05-04
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
STL64DN4F7AG	BSY6*OD42Q82	A	SH1A	2018-05-04
	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 double island 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-15th January 2018				
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	BSY6*OD42Q82									
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	0.912	mg	supplier	die	Silicon (Si)	7440-21-3		0.842	mg	923246	8420				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.031	mg	33991	310				
				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.004	mg	4386	40				
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.008	mg	8772	80				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	2193	20				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.02	mg	21930	200				
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	1096	10				
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.004	mg	4386	40				
				Leadframe	Copper & its alloys	44.934	mg	supplier	alloy	Copper (Cu)	7440-50-8		42.815	mg	952842	428150
								supplier	alloy	Iron (Fe)	7439-89-6		1.007	mg	22411	10070
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.061	mg	1357	610				
supplier	alloy	Zinc (Zn)	7440-66-6						0.053	mg	1180	530				
supplier	metallization	Silver (Ag)	7440-22-4						0.998	mg	22210	9980				
Soft solder	Solder	1.697	mg	JIG-R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.621	mg	955215	16210				
				supplier	solder	Silver (Ag)	7440-22-4		0.042	mg	24750	420				
				supplier	solder	Tin (Sn)	7440-31-5		0.034	mg	20035	340				
Bonding wire & Clip	Precious metals	7.978	mg	supplier	wire	Gold (Au)	7440-57-5		0.173	mg	21685	1730				
				supplier	clip	Copper (Cu)	7440-50-8		7.805	mg	978315	78050				
				Encapsulation	Other Organic Materials	44.323	mg	supplier	mold compound	Silica, vitreous	60676-86-0		34.794	mg	785010	347940
supplier	mold compound	epoxy resin	25068-38-6						5.762	mg	130000	57620				
supplier	mold compound	phenol resin	9003-35-4						2.659	mg	59991	26590				
supplier	mold compound	metal hydroxide	21645-51-2						0.886	mg	19990	8860				
supplier	mold compound	Carbon black	1333-86-4						0.222	mg	5009	2220				
Connections coating	Solder	0.156	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.156	mg	1000000	1560				