



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 *	2016-12-14
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	ADG MD CHAMPION
Representative Phone *		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
Legal Statement	<p>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 omprehensive 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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STL45N10F7AG	R1Y5*OD0BQ52	A	SH1A	2016-12-14
Amount		UoM	Unit type	ST ECOPACK Grade
95		mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	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
1 - Product(s) meets EU RoHS requirement without any exemptions	FALSE
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)	TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	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-20th June 2016				
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	R1Y5*OD08Q52					
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	1.854	mg	supplier	die	Silicon (Si)	7440-21-3		1.741	mg	939051	18326
				supplier	metallization	Aluminium (Al)	7429-90-5		0.047	mg	25351	495
				supplier	metallization	Titanium (Ti)	7440-32-6		0.016	mg	8630	168
				supplier	Passivation	Silicon Nitride	12033-89-5		0.012	mg	6473	126
				supplier	Passivation	Silicon Oxide	7631-86-9		0.016	mg	8630	168
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	539	11
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.014	mg	7551	147
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	539	11
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.006	mg	3236	63
Leadframe	Copper & its alloys	43.245	mg	supplier	alloy	Copper (Cu)	7440-50-8		42.142	mg	974494	443600
				supplier	alloy	Iron (Fe)	7439-89-6		0.991	mg	22916	10432
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.060	mg	1388	633
				supplier	alloy	Zinc (Zn)	7440-66-6		0.052	mg	1202	547
Soft solder	Solder	2.425	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.315	mg	954639	24368
				supplier	solder	Silver (Ag)	7440-22-4		0.061	mg	25155	642
				supplier	solder	Tin (Sn)	7440-31-5		0.049	mg	20206	516
Bonding wires	Other inorganic materials	0.018	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.018	mg	1000000	189
Bonding Ribbons	Other Nonferrous metals & alloys	0.348	mg	supplier	Ribbon	Aluminium (Al)	7429-90-5		0.348	mg	1000000	3663
Encapsulation	Other Organic Materials	46.954	mg	supplier	mold compound	Silica, vitreous	60676-86-0		36.859	mg	785002	387989
				supplier	mold compound	epoxy resin	25068-38-6		6.104	mg	130000	64253
				supplier	mold compound	phenol resin	9003-35-4		2.817	mg	59995	29653
				supplier	mold compound	metal hydroxide	21645-51-2		0.939	mg	19998	9884
				supplier	mold compound	Carbon black	1333-86-4		0.235	mg	5005	2474
connections coating	Solder	0.156	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.156	mg	1000000	1642