




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 *	2017-09-22
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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
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 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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STL60P4LLF6	R1UO*6B44B6F	A	Z8GA	2017-09-22
	Amount	UoM	Unit type	ST ECOPACK Grade
	80.00	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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	6, 5, 1	8	pin	
Comment	Package: Power FLAT 8L 6x5x1 P1.27			

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
5 - Product(s) is obsolete, no information is available	false
6 - 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)

Query : California Prop65 list, dated 27th January 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.02	DIE	275
Lead	1.29	SOFT SOLDER	16113

QueryList : REACH-12th January 2017				
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						Mfr Item Name	R1UO*6B4486F					
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	2.771	mg	supplier	die	Silicon (Si)	7440-21-3		2.657	mg	958860	33213
				supplier	metallization	Aluminium (Al)	7429-90-5		0.035	mg	12631	438
				supplier	metallization	Titanium (Ti)	7440-32-6		0.007	mg	2526	88
				supplier	Passivation	Silicon Oxide	7631-86-9		0.040	mg	14435	500
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.003	mg	1083	38
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.022	mg	7939	275
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.007	mg	2526	88
Leadframe	Copper & its alloys	46.739	mg	supplier	alloy	Copper (Cu)	7440-50-8		44.890	mg	960440	561125
				supplier	alloy	Iron (Fe)	7439-89-6		1.055	mg	22572	13182
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.063	mg	1348	788
				supplier	alloy	Zinc (Zn)	7440-66-6		0.056	mg	1198	700
				supplier	metallization	Silver (Ag)	7440-22-4		0.675	mg	14442	8438
Soft solder	Solder	1.350	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.289	mg	954815	16113
				supplier	solder	Silver (Ag)	7440-22-4		0.034	mg	25185	425
				supplier	solder	Tin (Sn)	7440-31-5		0.027	mg	20000	338
Bonding wire & Ribbon	Other inorganic materials	3.455	mg	supplier	wire	Copper (Cu)	7440-50-8		0.009	mg	2605	113
				supplier	ribbon	Aluminium (Al)	7429-90-5		3.446	mg	997395	43075
Encapsulation	Other inorganic materials	25.563	mg	supplier	mold compound	Silica, vitreous	60676-86-0		21.805	mg	852991	272563
				supplier	mold compound	phenolic resin	29690-82-2		0.894	mg	34972	11175
				supplier	mold compound	epoxy resin	25068-38-6		1.022	mg	39980	12775
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.512	mg	20029	6400
				supplier	mold compound	carbon black	1333-86-4		0.052	mg	2034	650
				supplier	mold compound	Zinc hydroxide	20427-58-1		0.256	mg	10014	3200
Connections coating	Solder	0.122	mg	supplier	mold compound	Magnesium hydroxide	1309-42-8		1.022	mg	39980	12775
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.122	mg	1000000	1525