



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 *	2014-09-11
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 *	Giovanni Giacobello	Representative Title	AMS & IPD Materials Declaration 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/internet/com/support/online_tech_support.jsp		

Uncertainty Statement


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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	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
	CSL6*6L31BCF	A	Z8GA	2014-09-11
Amount	UoM	Unit type	ST ECOPACK Grade	
8.80	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 c	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	2 -2 - 0.6	6	No lead	
Comment	Package: QFN POWER FLAT 2x2 6L; MDF valid for STL6N3LLH6			

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	CSL6*6L318CF						
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)	
Silicon die	Other inorganic materials	0.475	mg	die	die	Silicon (Si)	7440-21-3		0.446	mg	938947	50682	
Silicon die				metallization	metallization	Aluminium (Al)	7429-90-5		0.012	mg	25263	1364	
Silicon die				metallization	metallization	Copper (Cu)	7440-50-8		0.005	mg	10526	568	
Silicon die				passivation	passivation	Silicon Nitride (SiN)	68034-42-4		0.003	mg	6316	341	
Silicon die				passivation	passivation	Silicon Oxide(SiO2)	7631-86-9		0.004	mg	8421	455	
Silicon die				back side metallization	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	8421	455	
Silicon die				back side metallization	back side metallization	Silver (Ag)	7440-22-4		0.001	mg	2105	114	
Leadframe	Copper and its alloy	3.543	mg	supplier	alloy	Copper(CU)	7440-50-8		3.459	mg	976291	393068	
Leadframe			mg	supplier	alloy	Iron(Fe)	7439-89-6		0.078	mg	22015	8864	
Leadframe			mg	supplier	alloy	Phosphorus (P)	12185-10-3		0.001	mg	282	114	
Leadframe			mg	supplier	alloy	Zinc(Zn)	7440-66-6		0.005	mg	1411	568	
Die attach	Other inorganic materials	0.135	mg	supplier	glue	Silver (Ag)	7440-22-4		0.118	mg	874074	13409	
Die attach			mg	supplier	glue	Bismaleimide resin	Proprietary		0.008	mg	59259	909	
Die attach			mg	supplier	glue	Isobornyl Methacrylate	7534-94-3		0.008	mg	59259	909	
Die attach			mg	supplier	glue	polymer	Proprietary		0.001	mg	7407	114	
Bonding wire	Other inorganic materials	0.119	mg	supplier	wire	Copper(CU)	7440-50-8		0.119	mg	1000000	13523	
encapsulation	Other inorganic materials	4.402	mg	supplier	mold compound	Silica, vitreous	60676-86-0		4.125	mg	937074	468750	
encapsulation			mg	supplier	mold compound	epoxy resin	85954-11-6		0.132	mg	29986	15000	
encapsulation			mg	supplier	mold compound	phenol resin	26834-02-6		0.132	mg	29986	15000	
encapsulation			mg	supplier	mold compound	carbon black	1333-86-4		0.013	mg	2953	1477	
connections coating	Solder	0.126	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.126	mg	1000000	14318	