



life.augmented

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 *	2014-01-31
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 *	Antonella Lanzafame	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/web/en/support/online_tech_support.html		

Uncertainty Statement

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.


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
	A0WD*LCP154F	A	SH1A	2014-01-31
Amount	UoM	Unit type	ST ECOPACK Grade	
76.00	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	6,15, 5.20, 0.9	8	pin	
Comment	Package: Power FLAT 5x6 8L SHORT; MD valid for CP: LCP154DJF.			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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-16th December 2013				
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	A0WD*LCP154F					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	4.827	mg	supplier	die	Silicon (Si)	7440-21-3		4.577	mg	948208	60224
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.152	mg	31490	2000
die (s)				supplier	passivation	Esterified polyamid	63428-83-1		0.04	mg	8287	526
die (s)				supplier	passivation	Tetraethylene glycol dimethacrylate	109-17-1		0.004	mg	829	53
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	622	39
die (s)				supplier	metallization	Gold (Au)	7440-57-5		0.009	mg	1865	118
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.042	mg	8701	553
Leadframe	Copper & its alloys	41.856	mg	supplier	alloy	Copper (Cu)	7440-50-8		40.789	mg	974508	536697
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.959	mg	22912	12618
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.058	mg	1386	763
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.05	mg	1195	658
Soft solder	Solder	3.145	mg	JIG Table A	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.003	mg	954849	39513
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.079	mg	25119	1039
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.063	mg	20032	829
Bonding wire & Clip	Other inorganic materials	1.362	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.362	mg	1000000	17921
encapsulation	Other Organic materials	24.71	mg	supplier	mold compound	Silica, vitreous	60676-86-0		22.881	mg	925981	301066
encapsulation				supplier	mold compound	epoxy resin	85954-11-6		0.988	mg	39984	13000
encapsulation				supplier	mold compound	phenol resin	26834-02-6		0.742	mg	30028	9763
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.099	mg	4006	1303
connections coating	Solder	0.1	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.1	mg	1000000	1316