



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 *	2016-02-23
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 *	Emilio Castelli	Representative Title	APG 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/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
STA8089FG	A0EG*V839BDQ	A	ZY1A	2016-02-23
	Amount	UoM	Unit type	ST ECOPACK Grade
	135.00	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	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	7x7x1.0	56	flat	
Comment				

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	A0EG*V839BDQ					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dice	Other inorganic materials	7.448	mg	supplier	die	Silicon (Si)	7440-21-3		6.133	mg	823443	45430
Dice				supplier	metallization	Aluminium (Al)	7429-90-5		0.041	mg	5505	304
Dice				supplier	metallization	Copper (Cu)	7440-50-8		0.357	mg	47932	2644
Dice				supplier	metallization	Tantalum (Ta)	7440-25-7		0.475	mg	63776	3519
Dice				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	269	15
Dice				supplier	metallization	Titanium (Ti)	7440-32-6		0.022	mg	2954	163
Dice				supplier	metallization	Tungsten (W)	7440-33-7		0.004	mg	537	30
Dice				supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	134	7
Dice				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.066	mg	8861	489
Dice				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.347	mg	46590	2570
LEADFRAME (LGIC- C194)	Copper and its alloy	74.250	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		72.394	mg	975003	536252
LEADFRAME (LGIC- C194)			mg	supplier	ALLOY	Iron (Fe)	7439-89-6		1.745	mg	23502	12926
LEADFRAME (LGIC- C194)			mg	supplier	ALLOY	Zinc (Zn)	7440-66-6		0.089	mg	1199	659
LEADFRAME (LGIC- C194)			mg	supplier	ALLOY	Phosphorus (P)	7723-14-0		0.022	mg	296	163
LEADFRAME (LGIC- Ag)	Other organic materials	1.588	mg	supplier	COATING	Silver(Ag)	7440-22-4		1.588	mg	1000000	11763
DIE ATTACH 1 (Sumitomo CRM 1085A)	Other organic materials	1.250	mg	supplier	GLUE	Epoxy Resin	9003-36-5		0.200	mg	160000	1481
DIE ATTACH 1 (Sumitomo CRM 1085A)			mg	supplier	GLUE	Silver(Ag)	7440-22-4		1.050	mg	840000	7778
DIE ATTACH 2(Henkel ATB-F125E)	Other organic materials	0.204	mg	supplier	GLUE	Bisphenol-A-(epichlorhydrin) epoxy resin	5068-38-6		0.092	mg	450980	681
DIE ATTACH 2(Henkel ATB-F125E)			mg	supplier	GLUE	Silica	68610-41-3		0.112	mg	549020	830
BONDING WIRE (Heesung - 2N Au wir)	Other inorganic materials	0.134	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.133	mg	992537	985
BONDING WIRE (Heesung - 2N Au wir)			mg	supplier	BONDING WIRE	Palladium (Pd)	7440-41-7		0.001	mg	7463	7
ENCAPSULATION (Sumitomo -G631BC)	Other inorganic materials	49.724	mg	supplier	MOLDING COMPOUND	Epoxy Resin	Trade secret		6.215	mg	125619	46037
ENCAPSULATION (Sumitomo -G631BC)			mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		43.260	mg	874381	320444
ENCAPSULATION (Sumitomo -G631HC)			mg	supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.249	mg	1000000	1844
FINISHING - (ST380 -Sn)	Other inorganic materials	0.430	mg	supplier	EXTERNAL PLATING	Tin (Sn)	7440-31-5		0.430	mg	1000000	3185