



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 *	2016-09-30
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	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

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	<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
STE88N65M5	I1ZN*M5F9B5B	A	BO2A	2016-09-30
	Amount	UoM	Unit type	ST ECOPACK Grade
	28000.00	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
Not Applicable	Not Applicable	Not Applicable		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nickel (Ni)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
Not Applicable	38 - 24 - 12	na	Not Applicable	
Comment	Package: ISOTOP PARALL.			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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)

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						Mfr Item Name	I1ZN*M5F9B5B					
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	49.812	mg	supplier	die	Silicon (Si)	7440-21-3		46.250	mg	928491	1652
				supplier	metallization	Aluminum (Al)	7429-90-5		0.861	mg	17285	31
				supplier	metallization	Titanium (Ti)	7440-32-6		0.032	mg	642	1
				supplier	metallization	Nickel (Ni)	7440-02-0		1.893	mg	38003	68
				supplier	metallization	Silver (Ag)	7440-22-4		0.112	mg	2248	4
				supplier	Passivation	Silicon Nitride	12033-89-5		0.198	mg	3975	7
				supplier	Passivation	Silicon Oxide	7631-86-9		0.016	mg	321	1
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.022	mg	442	1
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.316	mg	6344	11
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.112	mg	2248	4
Lead-frame	Copper & its alloys	8568.692	mg	Supplier	alloy	Copper (Cu)	7440-50-8		8550.859	mg	997919	305388
				Supplier	alloy	Phosphorus (P)	12185-10-3		8.560	mg	999	306
				Supplier	metallization	Nickel (Ni)	7440-02-0		8.614	mg	1005	308
				Supplier	metallization	Phosphorus (P)	12185-10-3		0.659	mg	77	24
Soft solder	Solder	207.316	mg	JIG-R	Solder	Lead (Pb)	7439-92-1	7a-Lead in high me	193.840	mg	934998	6920
				Supplier	Solder	Silver (Ag)	7440-22-4		3.110	mg	15001	111
				Supplier	Solder	Tin (Sn)	7440-31-5		10.366	mg	50001	370
Insulator	Other inorganic materials	197.575	mg	Supplier	ceramic	Nickel (Ni)	7440-02-0		2.371	mg	12001	85
				Supplier	ceramic	Phosphorus (P)	12185-10-3		0.178	mg	901	6
				Supplier	ceramic	Manganese (Mn)	7439-96-5		7.706	mg	39003	275
				Supplier	ceramic	Titanium (Ti)	7440-32-6		0.810	mg	4100	29
				Supplier	ceramic	Molybdenum oxide	1313-27-5		9.879	mg	50001	353
Supplier	ceramic	Alumina (Al2O3)	1344-28-1		176.631	mg	893995	6308				
Screw	Other inorganic materials	7629.388	mg	Supplier	screw	Iron (Fe)	7439-89-6		7629.388	mg	1000000	272478
Nut	Other inorganic materials	1100.767	mg	Supplier	nut	Nickel (Ni)	7440-02-0		1100.767	mg	1000000	39313
Bonding wire	Other inorganic materials	2.536	mg	Supplier	wire	Aluminum(Al)	7429-90-5		2.536	mg	1000000	91
Connection isotop	Other inorganic materials	4767.885	mg	Supplier	connection	Copper (Cu)	7440-50-8		4766.746	mg	999761	170241
				Supplier	connection coating	Nickel (Ni)	7440-02-0		1.069	mg	224	38
				Supplier	connection coating	Phosphorus (P)	12185-10-3		0.070	mg	15	3
Encapsulation	Other inorganic materials	5364.485	mg	Supplier	Molding compound	Silica, vitreous	60676-86-0		4667.102	mg	870000	166682
				Supplier	Molding compound	Epoxy resin	25068-38-6		536.448	mg	100000	19159
				Supplier	Molding compound	Phenol resin	29690-82-2		134.113	mg	25000	4790
				Supplier	Molding compound	Carbon Black	1333-86-4		26.822	mg	5000	958
Finishing	Other inorganic materials	111.544	mg	Supplier	connection coating	Nickel (Ni)	7440-02-0		111.544	mg	1000000	3984